ROADWAY WORKER PROTECTION (RWP) SAFETY PLAN







EFFECTIVE: TUESDAY, APRIL 1, 2014 AT 0001 HOURS

Revision Log

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2.0	DS	06/01/13	Revised contact information
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Table of Contents

APPENDICES	34
Bridge Worker Safety on CFRC Right-of-Way Purpose and scope (§214.101)	
Section 10 - 49 CFR §214, Subpart B- Bridge Worker Safety Protection	
On-Track Worker Qualifications Prerequisites for Engineering Employee Qualification Responsibilities of Employee Seeking Qualification Responsibilities of Examining Employee Responsibilities of Supervisor Qualification as Employee-in-Charge Short-Term Project Procedure	24 24 25 26 26 26
Section 9 - Training and Qualification (§214.343) Training for All Roadway Workers (§214.345)	21 22 22 23 23 23
Section 7 – Use and Operation of On-Track Equipment Section 8 - Requirements for Roadway Workers (§220.11)	
On-Track Safety Procedures for Roadway Work Groups (§214.335) Train Approach Warning (§214.329) On-Track Safety Procedures for Lone Workers (§214.337). Using Individual Train Detection Rule Audible warning from trains (§214.339).	11 12 12 13
Working Limits (§214.319) Exclusive Track Occupancy (§214.321) EC-1/EC-1e Line 1 Authority Working Limits on Controlled Tracks - Conditional Stop Flag Protection to Establish Emergency Working Limits. Train Coordination. Working Limits on Non-Controlled Tracks	5 7 9
Job Briefing - Supervision and Communication (§214.315) (GS-3) On Track Safety and Job Briefing Requirements	3
Section 6 – Roadway Worker and On-Track Safety	
Responsibility of Individual Roadway Workers (§214.313):	
Responsibility of Employers (§214.311)	
Section 5 – CFRC RWP Program Responsibilities (49 CFR §214, Subpart C)	
Section 3 – CFRC S.T.A.R General Safety Rules Section 4 - Engineering Department Safety Rules	
Section 2 - CFRC Organization	
Section 1 - General Information	

Appendix A - Definitions	35
Appendix B - CFRC Good Faith Challenge Form	40
Appendix C - Statement of On-Track Safety	41
Appendix D - Table of Required Sight Distances	42
Appendix E - EC-1 Form	43
Appendix F - POC Daily Log	44
Appendix G - EIC POC Flagging Form	45
Appendix H - Orange Fence Policy and Communication Procedure	46
POC Training	
Employee-in-Charge / Point of Contact Responsibilities	
Employee-in-Charge / Point of Contact Communications	48

Section 1 - General Information

The Central Florida Rail Corridor (CFRC) Railroad Worker Protection (RWP) Safety Plan has been written in accordance with 49 CFR Part 214, Sub Part C and CFRC Rulebooks. CFRC Rulebooks will be in effect on CFRC territory for all tenant railroads operating on the CFRC. CFRC forms will be in effect. All forms not included in this document are available in the current version of the CFRC Operating Rule Book or by request to the CFRC RWP Administrator.

Current CFRC Rulebooks include:

- CFRC Operating Rules and Signal Aspects and Indications
- CFRC Air Brake, Train Handling and Equipment Handling Rule Book
- CFRC Timetable Special Instructions
- CFRC Safety, Transportation & Responsibility (STAR) Manual

Periodically, operating rulebooks are revised and reissued with new effective dates. When operating rulebooks are revised and reissued, it will be the responsibility of each contractor employee to obtain current rulebooks.

In this document, 49 CFR Part 214 requirements are referenced as (§214.XX) and CFRC Rules are listed by operating rule number.

Railroad Employees and Contractor workers shall be required to obtain and maintain the qualifications as outlined in this CFRC Railroad Worker Protection Safety Plan. Contractors must submit documentation to the Bombardier Chief Engineer and obtain authorization prior to their personnel beginning work that may result in fouling the track. Refer to Bombardier SOP 1201 for EIC qualification forms.

Failure to follow the procedures outlined in the CFRC Railroad Worker Protection Safety Plan may result in revocation of right of entry.

The CFRC Railroad Worker Protection Safety Plan applies to all contractors performing work within the CFRC right-of-way. Whenever any work is performed on the right-of-way, the safety procedures and requirements of this Plan govern all personnel entering the work site.

These rules do not supersede OSHA or FRA Regulations. In case of a conflict between this document and the OSHA or FRA Regulations, the more restrictive rule will apply.

Rev 3.0 4/9/2015

Section 2 - CFRC Organization

On November 3, 2011, the Florida Department of Transportation (FDOT) purchased from CSX Transportation, Inc. an existing and active Class IV passenger and freight railway right of way (ROW) for rail operations. This 61.35 mile corridor received the Federal Railroad Administration (FRA) alpha designation Central Florida Rail Corridor or CFRC. FDOT, as the owner, is responsible for maintenance and operations along the entire CFRC railroad corridor. The CFRC is geographically located between M.P. A749.61 and A813.82 such that it operates as a bridge between two sections of the CSXT A-Line abutting to the north and south of the corridor.

SunRail is the new commuter rail service that operates on this corridor. FDOT has awarded the operations and maintenance of the Corridor and SunRail commuter service to Bombardier Mass Transit Corporation. All references to CFRC employees, CFRC contractors and Bridge Engineers within this document refer to the contract services provided by FDOT's CFRC/SunRail Rail Office, Bombardier Mass Transit Services employees, their subcontractors and third party contractors, and Central Florida Commuter Rail Transit Project (CFCRT) Phase 2 Consultants to the FDOT. All referenced contractors and consultants will be responsible to comply with the applicable portions of 49 CFR Part 214 listed below. CFRC Rail Officers, as FDOT's representatives, will audit contractor compliance with this RWP Safety Plan.

RWP Administrator: Passenger Rail Operations Manager

District Five-State of Florida

801 SunRail Dr., Sanford, FL 32771

(407) 732-6709

RWP Compliance Oversight: CFRC Field Operations Supervisor

801 SunRail Dr., Sanford, FL 32771

(407) 325-6931

CFRC rail traffic includes CSXT freight trains, Florida Central Railroad (FCEN) freight trains, and Amtrak passenger trains. The CFRC currently carries 26 trains per day – 6 Amtrak, 10 local freight trains and 10 road freights (or through) trains. Freight rail traffic consists of a combination of through-freight service - tri-level auto trains, merchandise train, coal and rock unit trains; intermodal unit trains - local switching operations; and freight transfers from FCEN to CSXT Taft Yard. Additionally, Conrad Yelvington, a bulk commodities company, operates locomotives on tracks adjacent to the CFRC to move bulk sand or rock trains within their facilities. Amtrak traffic currently operates two passenger trains in each direction through the CFRC and operates a daily roundtrip Passenger/Auto Train from north of the CFRC to the Amtrak Auto Train Facility in Sanford at M.P. A766.00.

Train dispatching services for the CFRC is provided by Bombardier Transportation Services USA Corporation. The CFRC Central Dispatching Office (CDO) is located at the CFRC Operations Control Center (OCC), 801 SunRail Dr., Sanford, FL 32771.

Rev 3.0 i 4/9/2015

Section 3 – CFRC S.T.A.R. - General Safety Rules

GS-1. Safety Responsibilities

All employees governed by these rules, must ensure that:

- A copy of the CFRC Star Manual is accessible while on duty.
- Behavior in the workplace is civil and courteous.
- Local, state and federal laws and regulations that relate to job tasks are observed.
- Work areas and environment are clean, orderly and protected from controllable hazards.

GS-2. Substance Abuse

Employees reporting for duty, on duty, on CFRC property or occupying facilities provided by CFRC are prohibited from having in their possession, using, or being under the influence of alcoholic beverages or intoxicants.

Employees shall neither report for duty nor perform service while under the influence of, nor use while on duty or on CFRC property, any drug, medication, or other substance, including prescribed medication that will in any way adversely affect the employees' alertness, coordination, reaction, response or safety.

The illegal use and/or possession of a drug, narcotic or other substance that affects alertness, coordination, reaction, response or safety is prohibited while on or off duty.

GS-3. Job Briefing

- A. Effective job briefings at the beginning of and throughout our workday make us more aware of our surroundings and better prepared to recognize and avoid potential hazards. Employees must:
 - 1. Remain alert for anything out of the ordinary that occurs during your shift, and
 - 2. Report any suspicious activity to your immediate supervisor or dispatcher immediately. If they are not available, report the condition or activity directly to the SSCC at 1-877-235-7245.
- B. A job briefing must be conducted before beginning a work activity and when:
 - 1. Work activity or work conditions change, or
 - 2. Another person joins the crew, or
 - 3. Required to operate a hand operated main track switch in non-signaled territory, or
 - 4. Required to secure any train or equipment
- C. When conducting a job briefing, employees must:
 - 1. Discuss the sequence of job steps,
 - 2. Identify, eliminate, contain, or communicate all potential hazards related to the job,
 - 3. Inspect tools and equipment before use,
 - 4. Identify proper personal protective equipment for the job task,
 - 5. Ensure understanding of the planned sequence of events, and
 - 6. Follow up to ensure compliance with safe work practices.

GS-4. Warning other Employees

Warn co-workers of unsafe acts and hazards.

GS-5. Reporting Injuries or incidents

A. On Duty Injuries

Any employee experiencing an on-duty injury must report the injury to a supervisor at the time of the occurrence prior to leaving the property on the day of the occurrence so that prompt medical treatment may be provided. All required medical forms must be completed by the employee reporting the injury.

(Exception: An employee departing the property to obtain urgent medical attention for a serious injury must report the injury to a supervisor and complete the required medical forms as soon as practicable.)

B. Medical Attention

Employees must immediately notify their supervisor of the decision to seek medical attention as a result of any on-duty injury. This requirement is intended to facilitate work coverage and timely regulatory reporting.

C. Off Duty Injuries

Employees who sustain an off-duty injury that will in any way affect performance of their duties must report the injury to their supervisor prior to reporting for duty.

D. Information concerning injuries

Employees with knowledge or information concerning an injury or accident to themselves, another or non-employee must report the information to their supervisor at the time of the occurrence so that emergency assistance and proper medical care can be promptly provided.

E. All incidents

Employees must immediately report to the train dispatcher or supervisor all incidents involving equipment and any other incident involving loss or damage to CFRC property

GS-6. Personal Protective Equipment, Clothing, and Jewelry

- A. Obtain, be familiar with, and wear CFRC approved PPE and clothing required for the job classification and/or work environment. PPE must not be altered or otherwise tampered with.
- B. Ensure PPE is properly fitted, kept in good working condition, and available for immediate use.
- C. Comply with additional PPE requirements when entering a work area or customer facilities. Specific departmental PPE requirements can be found under the Departmental Safety Rules.
- D. CFRC approved high visibility apparel must be worn as a top layer of clothing within 25 feet of a track except when:
 - 1. Riding in enclosed equipment or vehicles.

2. Working in a designated shop or locomotive servicing facility and protected by blue flag protection.

- 3. Engineering employees are working underneath properly secured and protected roadway equipment.
- 4. Working at heights that require fall protection PPE.
- 5. Working in designated passenger loading/unloading areas.
- 6. Working as a welder performing field welds.
- E. Flame resistant high visibility apparel must be worn within 25 feet of a track when:
 - 1. Engaged in live electrical work,
 - 2. Cutting, burning or welding outside of a shop environment except when accompanied by a qualified watchman/lookout who is wearing high visibility apparel.
- F. Wear shirts that cover the chest, abdomen, and back with at least one-quarter length sleeves that provide protection from the sun, insects, abrasions, and scratches. Also, wear trousers that cover their entire lower body when working outside an office environment. Shorts must not be worn on-duty.
- G. Employees must not wear:
 - 1. Loose-fitting clothing or jewelry that could become entangled in equipment or create a hazard.
 - 2. Finger rings outside an office environment.
 - 3. Jewelry, including watchbands or metal objects when repairing or maintaining electrical equipment.
 - 4. Mouth and tongue jewelry.

GS-7. Operating Tools, Equipment, Doors, and Windows by Hand

When operating tools, equipment, doors and windows by hand:

- Use only tools and equipment you are qualified to use.
- Do not use excessive force.
- Inspect all tools and equipment and related safety devices for unsafe conditions before use, removing from service if defective.
- Use the proper tools for the purpose designed, unauthorized modifications are prohibited.
- Avoid placing any part of your hand or body where it can be pinched.
- Use the door handles or other opening/closing devices where provided.

GS-8. Slip, Trip and Fall Prevention

Constant awareness and concentration are your best protection against slip, trip, and fall hazards. Local conditions can change at any time and you must remain alert and mindful of your surroundings. Use designated walkways, handholds and railings when available. Always choose routes that afford the safest walking conditions and be in a position to have a clear view of where you are walking.

During times of poor weather or other unusual conditions, approved and appropriate personal protective equipment must be used.

GS-9. Avoiding Human Remains, Blood, or other Fluids

After any accident or incident where human remains, blood, or other fluids are observed on company equipment or property:

A. Avoidance and Notification

- Do not attempt to remove or clean this matter; it is not your responsibility.
- Promptly notify your supervisor, train dispatcher so that appropriate action can be taken to perform any necessary cleaning of equipment as soon as possible.

If you should come in contact with human remains, blood, or other fluids, immediately wash the contact area then report to the nearest medical facility for further examination.

B. Sharps and Needles

Only designated CFRC Medical and Occupational Heath Employees are authorized to use needles and sharps for occupational purposes. CFRC employees who utilize needles or sharps for medical purposes (i.e. diabetics) are responsible for the safe disposal of those needles or sharps. CFRC employees who utilize needles or sharps for medical reasons must follow these guidelines for proper disposal:

- Recap your hypodermic syringe or lancet after use.
- Store your new and used syringes or lancets in a hard, closed casing marked with the word "biohazard" and/or labeled with a biohazard label.
- Dispose of the hypodermic syringe or lancet off CFCR property in an appropriate manner.

Syringes or lancets are not to be discarded on CFRC Property. All CFRC employees should report inappropriate disposal to their supervisor. If you encounter needles or sharps on CFRC property:

- It is not your responsibility to dispose of these needles or sharps.
- Do not attempt to dispose of, or otherwise handle these needles or sharps.
- Promptly notify the proper authority so that appropriate action can be taken to safely remove any needles or sharps as soon as possible.

GS-10. On or About Tracks

When working on or about tracks:

- Apply the appropriate protection (3–Step, Roadway Worker, Blue Signal, etc.) for your job classification where required.
- Be alert for and keep clear of the movement of cars, locomotives, or equipment at any time, in either direction, on any track.
- Do not cross within 25 feet of the end of standing cars, equipment, or locomotives, except when proper protection is provided.
- Stand at least:
 - 30 feet or more from a switch or derail associated with the route of passing equipment, when practical.
 - 10 feet or more from a switch or derail being traversed by equipment during switching operations when practical.

Stop and look in both directions before making any of the following movements:

- o Fouling or crossing a track.
- Moving from under or between equipment.
- o Getting on or off equipment.
- Operating a switch.
- You may cross more than one track without stopping at each track if you determine it
 is safe to do so.
- Except for an Engineering Employee performing repairs, do not step or sit on any part of:
 - o a rail
 - o a switch or switch machine
 - o a frog
 - o a derail
 - o an interlocking machine or its connections
 - o a retarder
 - a defect detector.
- Never take shelter under any car, equipment, or locomotive.
- Do not use push poles to move locomotives or cars.

GS-27. Reporting Highway Crossing Malfunctions

Highway crossing warning devices observed to not be operating properly must be reported to the proper authority as soon as possible. Employees who routinely communicate with the dispatcher and possess voice radios should report crossing warning system malfunctions to the dispatcher as appropriate. Employees who do not have a voice radio or are unfamiliar with such communications should notify the SSCC at 1-877-235-7245. This number is included on the emergency notification sign that is in place at every road crossing on CFRC. This sign also contains identification information for the crossing that can greatly assist in taking the appropriate action in the event of a malfunctioning crossing warning device.

GS-28. Electronic and Electrical Device Use by Other Than Railroad Operating Employees

A. Definitions

Railroad Operating Employee – Any employee engaged in or connected with the movement of a train, including a hostler or engine mover; or any employee subject to the hours of service requirements governing train service employees.

Personal Electronic or Electrical Devices – Any electronic or electrical device not provided to employees by CFRC for authorized business purposes.

Railroad Supplied Electronic and Electrical Devices – Any electronic or electrical device provided or reimbursed by CFRC for authorized business purposes.

Red Zone – Any area surrounding working equipment, employees using tools and lifting operations which, if entered by an individual(s), creates the potential for injury as a result of being struck by equipment, tools, or material. At a minimum, a point 15 feet beyond the maximum reach of any extendible portion of a machine. The limits on the sides of non-extendible machines will be designated by a job briefing.

B. General Requirements

a. No individual shall use an electronic or electrical device if that use would interfere with the employee's or a railroad operating employee's performance of safety-related duties.

- b. Personal or railroad provided electronic or electrical devices may be used in the event of emergencies or for redundancy if radio or other communication failure.
- c. The use of railroad supplied electronic and electrical devices is authorized only when performing duties directly related to the employee's assigned job tasks.
- d. Railroad supplied electronic and electrical devices will be considered a personal device when used for any non-business purpose.

C. Personal Electronic and Electrical Devices

- a. While on duty, employees may only use personal electronic or electrical devices for minimal, personal voice or text communication. The devices and ear pieces must be powered off and stored out of sight when:
 - 1. Use will interfere or distract from safety or performance of duties,
 - 2. Located in the operating cab of a moving train or engine.
 - 3. Operating on-track or mechanized equipment,
 - 4. Riding on equipment,
 - 5. Engaged in a switching operation,
 - 6. On the ground within 25 feet from the nearest rail,
 - 7. Located within a red zone, or
 - 8. Located within dispatcher office.
- b. When communication is required with a remote source to affect the repair a locomotive, on-track, or mechanized equipment, track structure, or signal appliances and a railroad supplied device is not available; a personal electronic devices may be used.
- c. The use of a medical device that has been prescribed by a medical professional and approved for use by the CFRC is not restricted by this rule.

D. Railroad Supplied Electronic and Electrical Devices

- a. No individual located in the cab of a controlling locomotive, on-track equipment, or mechanized equipment shall use a railroad supplied electronic or electrical device unless a job briefing is held with operator and other affected employees and all agree the use is safe.
- b. Employees at the controls of a locomotive, on-track equipment, or mechanized equipment are prohibited from using railroad supplied devices when:
 - 1. Equipment is moving,
 - 2. Engaged in switching operations,
 - 3. When another employee is engaged in the preparation or repair of a train, ontrack equipment, or mechanized equipment.
- E. Employees outside the cab of a controlling locomotive, on-track equipment, or mechanized equipment may use a railroad supplied electronic device only when all of the following conditions are met:

- a. The use will not interfere or distract from safety or performance of duties,
- b. The employee is not fouling a track,
- c. The employee is not within four (4) feet of the nearest rail, and
- d. The employee is not within 15 feet of operating mechanized equipment being operated.
- F. The following devices are not restricted by any part of this rule:
 - a. Electronic control systems and information displays, either fixed or portable, within the locomotive cab.
 - b. Railroad supplied devices necessary to perform and report inspections and repairs.
 - c. Remote control transmitter necessary to operate a train or conduct switching operations.
 - d. Railroad issued radios.
 - e. Railroad approved electronic devices to monitor air quality, noise, or other environmental conditions.

Section 4 - Engineering Department Safety Rules

ES-1. Personal Protective Equipment

a. Wear head protection provided by the company at all times while on duty, except when working in an office, while riding in a highway motor vehicle, or while in a designated lunch break area. Non-hard hat areas may be designated by local management. (Hard hats are not required to be worn by engineering employees operating work equipment with fully enclosed cabs.)

- b. Wear approved safety glasses with side shields at all times while on duty, except when riding in a company vehicle with windows closed, working in an office, while in a lunch area, or while in a locker room.
- c. When working in areas where hearing protection may be required, have approved hearing protection devices available on your person, and wear them where required by posted notice or special instructions.
- d. Wear high top (6-inch or more) safety-toe shoes with laces, oil-resistant soles, and a distinct separation between heel and sole when working outside of an office environment.
- e. Wear an approved life vest when engaged in construction, inspection, or maintenance of a railroad bridge over or adjacent to water with a depth of four feet or more, or where the danger of drowning exists, except where other approved protection, such as safety nets, safety belts or harnesses, approved walkways, etc., are provided; or when working exclusively between the outside running rails.
- f. When life vests are required, ring buoys with at least 90 feet of line must be readily available for rescue operations. The distance between ring buoys must not be greater than 200 feet. Also, at least one lifesaving boat must be crewed if environmental conditions, such as weather, water speed, and/or terrain merit additional protection.
- g. Qualified bridge inspectors are not required to wear life vests when conducting inspections that involve climbing structures above or below the bridge deck.
- h. Charts identifying additional personal protective equipment required or recommended for specific work activities are located at the end of this section.
- i. When wearing a respirator, do not have facial hair where the sealing surface of the respirator comes in contact with your face.

ES-5. Ladders, Scaffolds, and Platforms

- a. Use approved ladders or scaffolds only. Use non-conductor type ladders and scaffolds near communication, signal, and electrical wires.
- b. Secure all ladders, scaffolds, and platforms.
- c. Climb no higher than the third rung from the top of a straight ladder or the second step from the top of a stepladder.
- d. Never climb a ladder on which someone else is standing.
- e. Face the ladder at all times and maintain three points of contact when ascending and descending.
- f. When available, use a safety carrier rail with a locking sleeve when climbing a structural, stationary, vertical ladder over ten feet tall.
- g. Use a hand line or a lifting device to move tools or materials to a level different from the one on which you are currently working.
- h. Do not to over-extend your reach.

ES-11. Cranes and Hoisting Equipment

- a. Respond to standard signals from the designated person only.
- b. Sound a warning signal before moving in any direction or near people.
- c. Keep boom and cables away from all obstructions or power lines.
- d. Do not use dragging movements, unless you are performing dragline operations.
- e. Turn off power before leaving equipment unattended.
- f. Lower the load and secure the boom when clearing for a passing train.
- g. Do not exceed capacity of the lowest rated component.
- h. Do not work under a suspended load or place yourself between a suspended load and an obstruction.
- i. Never leave a suspended load unattended.
- j. Tag lines must be used when necessary to control loads that are being moved higher than knee level. This does not preclude placing hands on a load for initial or final alignment.

ES-14. Hi-Rail Vehicles

- a. Occupy track only with proper authority.
- b. Stop on-track equipment when the operator's attention cannot be directed exclusively to controlling the movement.
- c. Perform roll-by inspections when two or more people are occupying the hi-rail. When operating alone, set the hi-rail on track and inspect hi-rail wheels to determine that they are in place.
- d. Be aware of the effects of the weather on starting and stopping hi-rail equipment.
- e. Operate the hi-rail vehicle within the speed chart provided in Operating Rule 720, Maximum Speeds.

ES-15. Mechanized Equipment

Operator must:

- a. Use equipment only to its rated capacity.
- b. Inspect to see that the equipment you are operating has a properly maintained back up alarm, top mounted flashing amber light, fire extinguisher and a first aid kit available.
- c. Wear seat belt when tramming.
- d. Sound a warning and reduce speed when view is restricted.
- e. Stop equipment when the operator's attention cannot be directed exclusively to controlling the movement.
- f. Transport passengers only in designated, permanently installed seats.
- g. Never leave running mechanized equipment unattended.
- h. Maintain contact between fuel pipe and tank while fueling.
- See that lockout/tagout devices are in place before maintaining or repairing equipment.
- j. Operate equipment at a safe speed following the speed chart provided in Operating Rule 720, Maximum Speeds.

ES-17. Getting On and Off, and Riding Equipment and Locomotives

a. Always mount and dismount cars, equipment, and locomotives from the side, using Rev 3.0 9 4/9/2015

the sill step and side ladder.

b. Never step on the sliding center sill or cushion under frame device of any car.

- c. Stay off couplers and their components.
- d. Always face the direction of movement when riding.
- e. Always face cars, equipment, and locomotives and maintain at least 3 points of contact while mounting or dismounting.
- f. When crossing over cars, equipment, keep clear of uncoupling levers and couplers.
- g. Crossover cars equipped with an end cross over platform.

ES-18. Coupling and Uncoupling Equipment

- a. Use standard signals per Operating Rule 202.
- b. Make sure work area is properly protected.
- c. Assure alignment of couplers.
- d. Stay in view of operator.
- e. Use knuckle mate to align coupler when possible.
- f. Be aware of slack action.
- g. When possible, keep one foot outside of the rail.

ES-20. Excavations, Pits and Manholes

- a. Shore vertical excavations of five feet deep or more.
- b. Call utility locators before you dig.
- c. Protect all open holes and trenches with adequate barricades.
- d. Do not use open flames to thaw frozen pits or manhole covers
- e. Ensure adequate atmospheric testing and ventilation in confined spaces.

ES-22. Fusees

- f. Always store fusees in approved metal containers.
- g. Read instructions on the side of fusee before using.

ES-23. On or Around and Crossing Tracks

- a. Ensure On-Track Worker Protection is in place when working within four feet of the nearest rail of any track.
- b. When observing passing trains or equipment always look in the direction from which the train or equipment is coming.
- c. High visibility vests will be worn by:
 - Train Control employees working within 15 feet of the traveled portion of any highway or grade crossing, and
 - Engineering employees performing road crossing work at grade.
- d. When flagging road crossings:
 - A lime yellow or orange vest must be worn
 - Give precise signals to traffic.

ES-24. Switch and Derail Operations

- a. Never operate switches or derails without proper authority.
- b. Always return derails and mainline switches to "normal" position when you have finished using them.

c. Always inspect switch points for obstacles before attempting to throw the switch and then check the points to make sure they are in the proper position before proceeding.

d. Leave switches and derails as found in non-signaled yard track.

Section 5 – CFRC RWP Program Responsibilities (49 CFR §214, Subpart C)

CFRC has overall responsibility for ensuring employees understand and comply with the rules governing on-track safety. The following are the responsibility of each Roadway Worker:

- 1. Compliance with operating rules,
- 2. Remaining clear of tracks until required by job task, and
- 3. Determining that the appropriate on-track safety has been established before fouling a track.

On-Track Safety Program Documents (214.309)

Rules and operating procedures governing track occupancy and protection shall be maintained together in one manual and be readily available to all Roadway Workers. Each Roadway Worker responsible for the on-track safety of others, and each Lone Worker, shall be provided with and shall maintain a copy of the program document.

Responsibility of Employers (§214.311)

The CFRC guarantees that Roadway Workers have the absolute right to challenge in good faith whether the level of on-track safety protection to be applied at the job location complies with the CFRC Operating Rules and to remain clear of the track until the challenge is resolved, without the fear of retribution or any other negative consequences. CFRC will ensure that this right is maintained for every worker on CFRC property. To that end, the following policy is in effect.

On-Track Safety Good Faith Challenge (CFRC Operating Rules Appendix B - Engineering Department)

Roadway Workers have the absolute right to challenge, in good faith, whether:

- a. The On-Track Safety procedures applied at the job location comply with CFRC Rules, or;
- b. Roadway maintenance machine or hi-rail vehicle in use complies with FRA regulations or has a condition that prevents its safe operation.

Making a Good Faith Challenge

Prior to initiating a challenge, the employee shall discuss the issue at the job location with the employee-in-charge to clarify any misunderstanding that may exist.

When making a good faith challenge:

- 1. Do not foul the track or operate the equipment until resolution of the challenge,
- 2. Refuse any directive to violate any on-track worker rule or FRA regulation, and
- 3. Notify the employee-in-charge (or the employee's immediate supervisor) of the challenge.

Receiving a Good Faith Challenge

When an employee makes a good faith challenge, the employee-in-charge must:

- 1. Instruct all employees to not foul the track, if on-track protection is the basis for the challenge,
- 2. Instruct the operator of the equipment not to operate the equipment, if an unsafe roadway maintenance machine or hi-rail vehicle is the basis for the challenge; and
- 3. Attempt to resolve the challenge.

If the employee-in-charge agrees with the concerns expressed, take the appropriate steps to correct the situation before permitting employee(s) to foul the track or operate the machinery.

If the employee-in-charge does not agree with the concerns expressed, inform the employee that there is no agreement and instruct employee to complete a CFRC Good Faith Challenge Form.

Resolving a Dispute Involving a Good Faith Challenge

In the event the roadway worker maintains the good faith challenge, the employee-in-charge must submit the completed CFRC Good Faith Challenge Form to the Passenger Rail Operations Manager and request resolution. The Passenger Rail Operations Manager will review the challenge and consult with operations and maintenance staff with jurisdiction to determine the outcome of the challenge and take the following action:

- a. If the challenge is valid, instruct the employee-in-charge to make whatever corrections are necessary, inform the employee(s) of the corrections, and instruct the employee(s) to return to work, or
- b. If the challenge is not valid, instruct the employee(s) to return to work.

The CFRC Good Faith Challenge form is provided in Appendix B.

Responsibility of Individual Roadway Workers (§214.313):

- (a) Each roadway worker is responsible for following the on-track safety rules of the railroad upon which the roadway worker is located.
- (b) A roadway worker shall not foul a track except when necessary for the performance of duty.
- (c) Each roadway worker is responsible to ascertain that on-track safety is being provided before fouling a track.
- (d) Each roadway worker may refuse any directive to violate an on-track safety rule, and shall inform the employer in accordance with 49 CFR §214.311 whenever the roadway worker makes a good faith determination that on-track safety provisions to be applied at the job location do not comply with the rules of the operating railroad.

Section 6 – Roadway Worker and On-Track Safety

Job Briefing - Supervision and Communication (§214.315) (GS-3)

A Job Briefing must be conducted before beginning a work activity and documented by signing the job briefing log at the work location and the briefing must include the means by which ontrack safety will be provided, instructions for the on-track safety procedures to be followed, and provide a clear understanding of safety requirements, the task to be performed and individual worker responsibilities.

The Job Briefing must be conducted by the EIC or a designated individual. The Job Briefing must include each Roadway Worker and/or Point-of-Contact (POC), if multiple work groups are included within the working limits. Also, a job briefing must be conducted with Roadway Workers arriving after the initial job briefing, prior to their entering the working limits. This shall include each roadway worker or additional work group.

If at any time conditions change, a person joins or leaves the crew or on-track protection or job responsibilities change, all roadway workers shall again be instructed on safety procedures or on-track protection to be used before the change is effective.

Job briefings concerning a change in conditions during the work need only cover the changes.

All employees must attend the Job Briefing and the Job Briefing is not complete until all roadway workers acknowledge understanding of the on-track safety being used.

If Lone Workers are using Individual Train Detection, as defined in §214.337 and Operating Rule 705, the Lone Worker shall communicate, as defined in §214.315, at the beginning of each duty period with a supervisor or another designated employee to receive a job briefing and to advise of his or her planned itinerary and the procedures that he or she intends to use for ontrack safety.

When communication channels are disabled, the job briefing shall be conducted as soon as possible after the beginning of the work period when communications are restored.

On Track Safety and Job Briefing Requirements

A Roadway Work Group is any group of workers, regardless of class or craft, working on a common task that involves fouling a track. One designated roadway worker in each group, referred to as the employee-in-charge, provides on-track safety for all members of the group. The employee-in-charge is responsible for ensuring the work group receives a job briefing on the type of on-track safety to be established.

Prior to starting work that will require an employee to foul a track, the employee-in-charge or other designated employee must perform a job briefing with the group to discuss:

- 1. Task to be performed,
- 2. Sequence of basic job steps,
- 3. Potential hazards,
- 4. Requirements to inspect tools and equipment before use,
- 5. Personal protective equipment required.
- 6. Type of on-track protection provided,

- 7. Type of tracks protected,
- 8. Time limits of protection,
- 9. Rules governing protection being provided, and
- 10. Confirmation that all members of the group understand the job briefing.

Before any member of a Roadway Work Group fouls a track, the employee-in-charge must inform each roadway worker:

- 1. Of the on-track safety protection established at the work location, and
- 2. That there will be no change in the type of on-track safety protection without notification of the change to each roadway worker.

At the beginning of each tour of duty, or when communications are not immediately available, a lone worker must conduct a job briefing and communicate his or her work plan and intended procedures for on-track safety as soon as possible with:

- a. His or her designated supervisor, or
- b. An employee designated by the supervisor.

The following questions should be able to be answered by all employees before the Job Briefing is considered complete:

- 1. Who is the Employee-in-Charge of my On-Track Safety?
- 2. What type of on-track safety do I have on the tracks I am working on?
- 3. Is this type of protection appropriate for the type of work I am performing?
- 4. Will other machines or personnel be involved in the work? And, if so, how?
- 5. What type of on-track safety do I have on adjacent tracks, if any?
- 6. When clearing the tracks, where is my designated place of safety?
- 7. What are the track limits of my on-track protection?
- 8. What is the time limit of my on-track safety?
- 9. Where can I find a copy of the CFRC RWP Safety Plan?
- 10. Do I understand all aspects of my on-track safety and feel that I am adequately protected against trains and on-track equipment?

Additionally, the following should be able to be answered by all employees:

- 1. Is any additional PPE required?
- 2. Are there overhead electrical cables?
- 3. Have tools and equipment been checked for safe operation?
- 4. Where is the nearest First Aid kit?
- 5. What is the Emergency Action Plan?
- 6. What local hazards have been identified? And how will these be addressed to prevent an incident?
- 7. Will work take place on an elevated structure? Has fall protection equipment, if required, been inspected?
- 8. Will the work take place over water, and if so, what PPE and rescue equipment is required? Has the equipment been inspected?
- 9. Any other job specific precautions necessary?

Working Limits (§214.319)

Working limits is a segment of track with defined boundaries established in accordance with this rule. Only one qualified roadway worker will establish and control working limits for the purpose of on-track safety. All movements of trains, engines and other railroad equipment within established working limits will be under direction of the employee-in-charge. Working limits shall not be released for trains, engines, or other railroad equipment until all affected roadway workers have either left the track or have been afforded on-track safety through train approach warning in accordance with §214.329. Working limits for roadway work groups engaged in large-scale maintenance or construction projects must include adjacent tracks.

Exclusive Track Occupancy (§214.321)

On controlled track (a track upon which all movements of trains must be authorized by a train dispatcher or control operator), working limits may be established in accordance with On-Track Worker Rules 708 – Flag Protection to Establish Emergency Working Limits, 704 – EC-1/EC1e Line 1 Authority, 707 – Working Limits on Controlled Tracks (Conditional Stop)

EC-1/EC-1e Line 1 Authority

Before occupying or fouling a controlled track to perform short-term work or move on-track equipment, the employee-in-charge must:

- 1. Have a copy of the current day dispatcher bulletin for the territory involved, and
- 2. Receive authority to occupy or foul track and copy the authority onto line 1 of Form EC-1/EC-1e.

Use radio communication, if possible, when requesting Form EC-1/EC-1e line 1 authority and provide the following to the control station:

- 1. Your name and ID number.
- 2. Specific location and milepost of initial occupancy,
- 3. Specific track name or number,
- 4. Beginning and ending limits of the request,
- 5. Direction of travel needed, and
- 6. Length of time necessary to complete work and clear the track.

Copy Form EC-1/EC-1e line 1 authorities onto the prescribed form in the prescribed format.

A Form EC-1/EC-1e line 1 authority may be issued in cases of emergency when a conflicting train is stopped within the required limits provided the train dispatcher confirms that the train is stopped. The employee requesting authority must:

- 1. Hold a job briefing with the crewmembers of the stopped train, and
- 2. Identify the train ID, locomotive number, and location and record that information on Form EC-1/EC-1e.

When receiving and copying Form EC-1/EC-1e line 1 authority, copy the following into the remarks section:

- 1. Required information not contained in dispatcher bulletin, and
- 2. The following required information on any preceding train:

- 1. Locomotive number,
- 2. Train number,
- 3. Direction of travel, and
- 4. Location.

After receiving and copying Form EC-1/EC-1e line 1 authority:

- 1. Conduct a job briefing with all employees who will operate or work under the authority,
- 2. In multiple track territory, ensure all employees covered by the protection acknowledge the specific track to be occupied or fouled,
- 3. Ensure all occupants of on-track equipment initial the copied Form EC-1/EC-1e, and
- 4. If it has been 30 minutes or more between the initial job briefing and time the track will be occupied or fouled, read Form EC-1/EC-1e aloud and conduct another job briefing.

When issued a Form EC-1/EC-1e line 1 authority to follow a preceding train, do not foul or occupy the track until confirming the preceding train has passed the initial point of occupancy by:

- a. Visually identifying the train by locomotive number, or
- b. Verbal confirmation from the train crew or train dispatcher.

The employee who received EC-1/EC-1e line 1 authority may permit on-track equipment movements not associated with the working group within the limits of the authority after:

- 1. Establishing on-track safety for the employees, and
- 2. Recording onto the proper form the name of the employee-in-charge of the other work group and the nature of the work to be performed.

Do not operate into any authority issued to another employee until that employee gives permission to occupy the track within the authority. If granted permission of opposing limits within the authority, operators of opposing equipment must:

- 1. Announce passing all mileposts, and
- 2. Confirm understanding of any do not pass limit.

When operating within the limits of an EC-1/EC-1e line 1 authority, employees must:

- 1. Stop at each control point and conduct a job briefing to verify authority extends beyond the control point before proceeding,
- 2. Not pass a preceding train without the permission and protection of the train dispatcher,
- 3. Not occupy or foul any track not covered by the authority,
- 4. Not move in a direction other than the one authorized, and
- 5. Not occupy a section of track after that section has been released or reported by.

Employees operating within the limits of EC-1/EC-1e line 1 authority must make radio announcements:

- 1. Stating initial occupancy location prior to fouling or occupying the track,
- 2. Prior to passing a control point, and
- 3. In non-signal territory, prior to passing each end of siding locations.

When making required radio announcements, employees must use positive identification and state:

- 1. Track name or number.
- 2. Direction of travel, and
- 3. Name and milepost of location.

When instructed by the train dispatcher to report by specific locations, make sure:

- 1. The entire movement is clear of the location in the specified direction before reporting by the location, and
- 2. To receive a new authority for those limits prior to occupying any portion of track reported by.

Promptly release EC-1/EC-1e line 1 authorities to the train dispatcher after the entire movement clears the limits of the authority. Make every effort to clear the limits before the expiration of the time authorized and do not consider the authority clear until the train dispatcher acknowledges his or her understanding.

If unable to clear the limits of an authority before the time limit expires, contact the train dispatcher and request a time extension. If unable to contact the train dispatcher or if the train dispatcher does not grant a time extension, do not exceed restricted speed until the authority is cleared.

Working Limits on Controlled Tracks - Conditional Stop

When long term working limits will be necessary, the employee-in-charge must request a dispatcher message to be issued. The request must be made at least 14 hours in advance and include:

- 1. Subdivision;
- 2. Date:
- 3. Time limits;
- 4. Name and initials of the employee in charge;
- 5. Specific track limits of either mile post, control point, or main track yard limits; and
- 6. Any instructions related to the posting of signs.

Before any member of the work group fouls or occupies the track within the working limits, the employee-in-charge must:

- 1. Obtain a current dispatchers bulletin that contains the dispatchers message governing the working limits for that day;
- Contact the train dispatcher and confirm the dispatcher bulletin date and dispatcher message number for the working limits;
- 3. Inform the dispatcher if the signal system will be affected;
- 4. When control points are within the work limits, confirm with the dispatcher how trains will move through the control point;
- 5. In multiple track territory, confirm with the dispatcher which tracks will be occupied by work forces and which tracks will be used to pass trains;
- 6. Confirm with the train dispatcher the use and position of switches within the work limits:

7. Receive from the dispatcher and copy from the dispatchers bulletin an authority number, train dispatchers OK and initials, and time authorized, and

8. Ensure signs are properly posted.

Signs are required in conjunction with long-term work limits and must be:

- 1. Clean and easily recognizable, and
- 2. Posted no more than 30 minutes in advance of the effective time, as long as the employee-in-charge has the ability to communicate with ant train or equipment that approaches the working limits.

If permanent conditions prevent the display of wayside signs as directed by rule:

- 1. Train dispatcher must be notified, and
- 2. A dispatcher's message must be issued stating how signs are displayed.

Unless stated otherwise in a dispatcher message or Form EC-1, wayside signs will be placed at the beginning and end of the restriction as indicated by the chart below:

Number of Tracks	Sign Placement	
One	Place signs next to the affected track.	
Two	Place signs on the field side (outside) of the affected track.	
Three or more	Place signs to the field side of the affected track for the outside track(s) and next to the affected track for middle track(s).	

Place Warning signs at least two miles, but not more than two and one-half miles, from the beginning of the working limits on each end.

Place Conditional Stop signs in the following locations:

- 1. The beginning of the limits on each end,
- 2. Each junction point, and
- 3. Other locations as specified in dispatcher message.

The employee-in-charge is responsible for all train and on-track equipment movements within the working limits and must make a written record on the prescribed form of all movements permitted to enter and move within the working limits.

Before granting permission for movements not part of the working group to enter or move within the working limits, the employee-in-charge must:

- 1. Ascertain that all men and equipment of the working group are clear of the limits or that portion of the limits on which the movement will be authorized to operate, and
- 2. Determine the track or portion of track is safe for movement.

The employee-in-charge must communicate the following information when granting permission for a train or on-track equipment to enter long-term working limits using the following verbiage:

- 1. Locomotive number of a train or name of on-track equipment operator,
- 2. Name of the employee-in-charge of the working limits,
- 3. Milepost location of the working limits or specific portion of the working limits the train or on-track equipment may occupy, and
- 4. Permitted operating speed of the train or on-track equipment that must be one of the following:
 - a. Restricted speed, or
 - b. A specific speed, or
 - c. Authorized speed.

The employee-in-charge may permit a train or on-track equipment to proceed to one intermediate location within the working limits and stop. When safe to do so, the employee-in-charge must clear the movement through the entire remaining limits.

After granting permission to a train or on-track equipment that is not part of the working group to enter and move in the working limits, the employee-in-charge must not allow men and equipment in the working group to foul the track until verifying that the movement is clear of the limits.

The employee-in-charge must plan to have all employees and equipment clear of the working limits before the expiration time. Before clearing the authority, make certain:

- 1. All men and equipment of the working group are clear of the limits,
- 2. The track is safe for normal operation or the train dispatcher has been advised of any necessary restrictions for movement,
- 3. All trains and on-track equipment that were cleared to enter and move within the limits have cleared the limits, and
- 4. Promptly remove signs after the work authority expires or is canceled.

When employee-in-charge determines the track cannot be cleared before the expiration time, he or she must take one of the following actions at least five minutes before the expiration:

- a. Obtain a new authority from the train dispatcher, or
- b. Post a flagman at each Warning sign.

Flag Protection to Establish Emergency Working Limits

If unable to contact the train dispatcher to establish working limits, use flag protection in the following circumstances:

- a. In emergency situations; or
- b. To protect defects in track, bridge, culvert, or other track structure; or
- c. In unusual situations such as being unable to clear an authority before it expires.

Do not use flag protection when weather conditions obstruct or affect visibility, except in an emergency.

When using flag protection, maintain it in both directions until:

a. The condition is corrected, or

b. Notified by the train dispatcher that protection has been provided and all affected trains have been notified.

Do not allow trains and on-track equipment to proceed beyond the point flagged until:

- 1. The employee-in-charge provides the flagman with written instructions, and
- 2. The flagman shows the instructions to the locomotive operator or equipment operator.

Train Coordination

When necessary to establish on-track safety on controlled tracks with Train Coordination, the employee-in-charge must:

- 1. Visually determine the train is stopped,
- 2. Conduct a job briefing with the crew of the train,
- 3. Determine the limits of the train's authority,
- 4. Determine which method of operation and related rules are in effect,
- 5. Instruct the train crew not to move unless directed by the employee-in-charge, and
- 6. Instruct the train crew not to release any authority until notified by the employee-incharge that it is safe to do so.

Once Train Coordination is established, the employee-in-charge must ensure no members of the working group foul any track outside of the train's authority.

When Train Coordination on-track safety is no longer required:

- 1. Ensure all roadway workers are clear of the track, and
- 2. Inform the train crew that protection is no longer required and the instructions of the train dispatcher will govern their movements.

Working Limits on Non-Controlled Tracks

On non-controlled track (a track upon which trains may move without receiving authorization from a train dispatcher or control operator), Inaccessible Track (§214.327) (working limits) is established in accordance with On-Track Worker Rule 706.

To establish working limits on non-controlled tracks:

- 1. Make prior arrangements with the employee responsible for the track or tracks involved,
- 2. Ensure the tracks are not occupied by any equipment not under the control of the employee- in-charge, and;
- 3. Make the tracks inaccessible to all trains, locomotives, and on-track equipment.

Make non-controlled tracks inaccessible to all trains, locomotives, and on-track equipment by one of the following methods:

- a. A flagman posted with instructions and the capability to hold all movements clear of the limits, or
- b. Lining and locking switches with an effective locking device in a position that prevents movement into the tracks, or

c. Applying a derail that is locked with an effective locking device at a location that prevents movement into the working limits, or

d. Discontinuity of the rail to prevent movement into the working limits.

When remotely controlled switches provide access to non-controlled tracks, the employee-incharge must verify all of the following with the employee responsible for operating the remotely controlled switches:

- 1. Switches are lined in a position that prevents access into the tracks,
- 2. Locking devices or blocking has been applied to the switches to prevent operation, and
- 3. Locking or blocking will not be removed until permission has been granted by the employee- in-charge.

Working limits are not required on non-controlled tracks when moving on-track equipment from the clearing location to the work site or back. When moving equipment on non-controlled tracks:

- 1. Make prior arrangements with the employee who is responsible for movement on the tracks, and
- 2. Make all movements prepared to stop within one-half the range of vision, not exceeding 10 MPH.

On-Track Safety Procedures for Roadway Work Groups (§214.335)

No member of a roadway work group may foul a track unless he has been informed by the employee-in-charge that on-track safety is being provided.

Train Approach Warning (§214.329)

Use Train Approach Warning for on-track safety only if:

- 1. At least two qualified roadway workers are working together and one of the employees is designated as the watchman,
- 2. All employees can reach an established place of safety at least 15 seconds before a train or on-track equipment reaches the location,
- 3. A method of communicating the approach of a train is established,
- 4. Employees hold a job briefing and all confirm their understanding and responsibilities,
- 5. Employees are performing routine maintenance or minor repairs that will not affect the safe passage of trains or on-track equipment,
- 6. Watchman/lookout knows and maintains required sight distance,
- Watchman/lookout has unrestricted ability to see and hear approaching trains or ontrack equipment, and
- 8. Watchman/lookout has access to a working radio.

The employee protected by Train Approach Warning must:

- 1. Remain in a position that allows receiving a train approach warning from the watchman, and;
- 2. Immediately move to the predetermined place of safety when a warning is received.

When Train Approach Warning is used to protect more than one employee, the watchman must be equipped with and use the following devices to provide warning:

- 1. Whistle or air horn.
- 2. White disc or flag when visibility is good, and
- 3. White light or red fusee when visibility is poor.

When Train Approach Warning is used to protect only one employee, audible and visual warnings are not required when:

- 1. Advanced watchman is not required, and;
- 2. Watchman can physically touch the employee being protected.

The employee providing watchman duties for Train Approach Warning must:

- 1. Not foul any track unless necessary to provide warning,
- 2. Not perform any tasks unrelated to providing warning or that interfere with providing warning to the employee being protected,
- 3. Provide warning as if every train or on-track equipment movement is approaching at the maximum authorized speed allowed, and
- 4. Provide warning sufficiently in advance to allow all workers and watchman to reach the predetermined place of safety at least 15 seconds before the train or on-track equipment reaches the location.

On-Track Safety Procedures for Lone Workers (§214.337)

This section establishes the on-track safety procedures for lone workers. A lone worker who fouls the track while performing routine inspection or minor correction may use individual train detection to establish on-track safety only when permitted by Rule 705.1 through 705.2

Using Individual Train Detection Rule

A lone worker may use Individual Train Detection for on-track safety when he or she:

- 1. Knows the required sight distance and has completed a Statement of On-Track Safety (SOTS1) before fouling the track;
- 2. Has access to a working radio;
- 3. Is performing routine maintenance or minor repairs that will not affect the safe passage of trains or on-track equipment;
- 4. Has completed a required job briefing, when communication is available;
- 5. Is not performing work in an interlocking, control point, or remotely controlled hump yard;
- 6. Has established a place of safety:
- 7. Has the ability to see and hear the approach of a train or on-track equipment and that ability is not impaired by noise, lights, weather conditions, passing equipment on adjacent tracks, or any other condition:
- 8. Is not prevented from hearing the approach of a train or on-track equipment and no power- operated tools or roadway maintenance machinery is in use; and
- 9. Maintains the required sight distance and has the unrestricted ability to reach the predetermined place of safety at least 15 seconds before a train moving at the maximum authorized track speed reaches his or her location.

When using Individual Train Detection:

1. Do not perform any work that interferes with the ability to see or hear the approach of a train or on-track equipment,

- 2. Maintain a constant lookout for approaching trains and on-track equipment,
- 3. Keep the completed SOTS1 form in your possession at all times when fouling the track, and.
- 4. When a train or on-track equipment approaches, move to the designated place of safety at least 15 seconds before the train or on-track equipment reaches the location.

The CFRC Statement of On-Track Safety form is provided in Appendix C.

Audible warning from trains (§214.339)

CFRC Operating Rule 203.1 and 203.2 (b). The engine horn will be sounded and the engine bell rung by trains approaching and passing roadway workers identified by white or orange hard hats.

Rev 3.0 13 4/9/20154/9/2015

Section 7 – Use and Operation of On-Track Equipment

On-track equipment must be inspected before it is operated to make certain it is safe and in compliance with CFRC standards and federal regulations.

Each on-track roadway maintenance machine and hi-rail vehicle must:

- 1. Be inspected each calendar day before use, and
- 2. Have the operator's manual located on the equipment.

When inspecting on-track roadway maintenance machines and hi-rail vehicles, make certain each is equipped with the following:

- 1. Effective brakes:
- 2. Operable horns/audible devices and change-of-direction alarms;
- 3. Operable headlights and strobe lights;
- 4. Fire extinguisher, first aid kit, and flagging kit;
- 5. Safety glass and operable windshield wipers;
- 6. Locking pins, if it is equipped with turntables; and
- 7. Operable heater and ventilation system.

When inspecting on-track equipment that is not a roadway maintenance machine or a hi-rail vehicle, make certain it is equipped with the following:

- 1. Effective brakes,
- 2. Lock-up devices that are in place, and
- 3. Audible warning device unless operator is equipped with a whistle.

The following roadway maintenance machines must have a pressurized cab:

- 1. Tampers,
- 2. Ballast regulators,
- 3. Tie bed scarifiers, and
- 4. Undercutters.

If a component listed as an FRA safety required component is defective and the condition will not make the equipment unsafe to operate, then:

- 1. Complete and attach an FRA safety exception tag to the defective machine or hi-rail vehicle at or near the operator's control panel,
- 2. Report the condition to the employee-in-charge, and
- 3. Document the defect on the Machine Failure Report Form.

If a defective condition makes the machine unsafe to operate:

- 1. Do not operate the equipment until repaired,
- 2. Affix an out-of-service tag to the ignition switch or similar device, if the equipment cannot be repaired, and
- 3. Report the condition to the employee-in-charge and document on the daily inspection report.

If a defective condition does not make the machine unsafe to operate, the machine may be operated for up to seven days with the defect.

When machine repairs are completed:

- 1. Document repairs in the machine's logbook, and
- 2. Remove the pre-addressed FRA safety exception tag and mail to MOW Manager, 801 SunRail Drive, Sanford, FL 32771.

Any piece of equipment or vehicle large enough to carry its instructional manual must have the document(s) on the equipment or vehicle.

Before occupying a controlled track, the leading and trailing pieces of on-track equipment working or traveling together as a group must have the flagging devices listed below. A single piece of on-track equipment operating independently, including hi-rail vehicles, must also have these flagging devices:

- 1. Four red fusees.
- 2. Two red flags, and
- 3. One white light.

On-track equipment required to have operable lights must have those lights on when the equipment is moving.

On-track equipment not equipped with lights must have a white light to the front and a red light on the rear when operating:

- a. At night, or
- b. In tunnels, or
- c. In fog or other weather conditions that limit visibility.

When operating on-track equipment, employees must:

- 1. Ensure all occupants are seated in permanently installed seats.
- 2. Instruct occupants to look out in both directions,
- 3. Specify each employee's duties when the equipment must be removed from the track,
- 4. Apply brakes gradually unless a condition requires stopping in the shortest possible distance.
- 5. Communicate to workers on or about tracks before getting closer than 15 feet to them,
- 6. Perform required maintenance, tests, and other adjustments in accordance with the manufacturer's recommendations.

When operating on-track equipment, employees MUST NOT:

- a. Use the equipment for any purpose other than company business, or
- b. Permit tools or materials to obstruct the operation of the brakes or warning devices, or
- c. Restrict or interfere with the intended function of any device or equipment, or
- d. Permit employees to ride in or on the equipment unless authorized to do so by the proper authority and the employees are riding as part of their assigned duties, or
- e. Apply any device to any on-track equipment unless approved by the Director Work Equipment, or

f. Tow equipment if doing so exceeds the braking capacity of the towing machine, or

g. Operate equipment that is loaded beyond its maximum capacity.

When operating on-track equipment, operate at a speed that permits stopping within one-half the range of vision. Do not exceed the speed authorized for trains on the same track or listed in the table below, whichever is less.

Type of Equipment or Operation	Must Not Exceed
Rail Detector Car	40 MPH
Poil Highway yohiolo loog than 10 001 CVM	Forward – 40 MPH
Rail-Highway vehicle less than 10,001 GVW	Reverse – 20 MPH
Poil Highway yohiolo more than 10,000 CV///	Forward – 30 MPH
Rail-Highway vehicle more than 10,000 GVW	Reverse – 10 MPH
Type of Equipment or Operation	Must Not Exceed
Rail Grinders	50 MPH
Ballast shoulder cleaner and Loram Ditcher	40 MPH
Tampers, ballast regulators, and other self- propelled on-track equipment not previously designated	30 MPH
Burro Cranes	20 MPH
When pulling a push car	30 MPH
When pushing a push car	Straight Track – 10 MPH
When pushing a push car	Curves – 5 MPH
All on-track equipment moving over self- guarded frogs or through the spring rail side of the frog	1 MPH
Type of Equipment or Operation	Must Not Exceed
Operating through the limits of long-term working limits or when more than one vehicle is operating within the limits of a single EC-1/ EC-1e line 1 authority	20 MPH unless a higher speed is authorized by the employee-in-charge
Operating through turnouts, over facing point hand-operated switches or facing point frogs, over power-operated switches, over RR crossings at grade, passing people working around the tracks, passing passengers waiting for trains at passenger stops	5 MPH

When using pushcarts:

- 1. Do not load beyond rated capacity, and
- 2. Unload before ramping on or off flat cars.

Transport heavy materials only on push cars or trailer cars coupled behind self-propelled ontrack equipment. Do not permit riders on push cars loaded with heavy materials except in cases of emergency and only after taking the necessary safeguards.

When using personnel carriers:

- 1. Comply with all instructions of the safety decals,
- 2. When pulling a personnel carrier, do not pull other pushcarts with the same equipment,
- 3. Position them in gang consists to enable pulling the carrier in either direction, and
- 4. If they must be pushed, place the carrier in the trailing position at the first opportunity.

Maintain the following minimum distances between the machine you are operating and the machine ahead for the described activity, when:

- a. Working: 40 feet unless a different distance is specified. Ballast regulators must maintain 200 feet, or
- b. Traveling: 200 feet. Ballast regulators must maintain 400 feet, or
- c. Bunching: 40 feet unless speed is 5 MPH or less, then maintain sufficient distance to prevent an accident.

The Red Zone for on-track equipment that does not have extendible parts is as follows:

- 1. From 15 feet in front of the equipment to 15 feet behind the equipment, and
- 2. From the sides of the equipment as defined in the job briefing.

Red Zone for on-track equipment that has extendible parts is as follows:

- a. From 15 feet in front of the equipment to 15 feet behind the equipment, or
- b. A minimum of 15 feet beyond the maximum reach of the extendible parts of the equipment on all sides.

Employees must not enter the Red Zone of other equipment until the operator:

- 1. Notifies employees that it is safe to enter the Red Zone,
- 2. Establishes eye contact, and
- 3. Receives verbal notification that employees wish to enter the Red Zone.

Operators of on-track equipment must not resume work when employees are located within the Red Zone of the equipment until holding a job briefing to establish safe work procedures.

Employees and backhoe operators must take the following actions before employees enter the Red Zone of the backhoe:

- 1. The operator and the employee(s) must establish eye contact,
- 2. The backhoe operator must receive verbal communication from the employee(s) stating that the employee(s) wish to enter the Red Zone,
- 3. The backhoe operator must notify the employee(s) when it is safe to enter the Red Zone and employee(s) must not enter until it is safe to do so,
- 4. The backhoe operator must stop all movement of the equipment and place the backhoe in neutral, and
- 5. Backhoe operator must remove and raise hands from controls of the boom and

bucket.

When operating on-track equipment and it is necessary to inspect a switch:

- 1. Stop before reaching the switch,
- 2. Inspect the switch,
- 3. Restore the switch to the normal position,
- 4. Make certain switch points fit properly,
- 5. Lock the switch, and
- 6. Then proceed over the switch.

When a main track switch has been lined for movement of on-track equipment or for other reasons, the switch must be:

- 1. Restored to the normal position,
- 2. Locked and the lock tested, and
- 3. Spring switches must be hand lined before operating through them.

When approaching a highway-rail crossing at grade:

- 1. Be prepared to stop short of the crossing,
- 2. Do not operate on-track equipment over the crossing unless the way is known to be clear, and
- 3. If necessary, use a flagman wearing a lime yellow or orange vest to stop highway traffic.

Do not operate on-track equipment between a passenger train that is receiving or discharging passengers and the station or station platform.

When operating behind a train, employees must not:

- a. Follow a moving train closer than 600 feet, or
- b. Approach a standing train closer than 200 feet unless necessary to clear the track.

When operating equipment or hi-rail vehicles on a track that will be passed by a train on an adjacent track:

- a. If safe to do so, stop and exit the vehicle, or
- b. If it is not safe or practical to stop and exit the vehicle, reduce speed to 10 MPH and maintain a lookout for objects falling or swinging from the train.

When a train is approaching a work location on an adjacent track:

- 1. Ensure all employees and equipment are clear of the adjacent track.
- 2. Secure rotating machinery to prevent it from fouling the adjacent track, and
- 3. Lower all buckets and boom attachments to rest with the boom parallel to the track and load line tightened.

When being passed by a train on an adjacent track, inspect the passing train for defects as follows:

1. Stand at least 30 feet from the passing train when possible,

2. If two or more employees are present, position at least one employee on each side of the train, and

3. Promptly notify the train crew of the results of the inspection.

When handling rail cars, make certain to:

- 1. Only handle two cars at a time unless using a Brandt-type vehicle or car mover, and
- 2. Test the rail car air brakes when required as specified by CFRC Air Brake and Train Handling Rules.

A qualified CFRC employee must directly supervise and instruct any non-CFRC person operating equipment on CFRC track. The CFRC employee is responsible for establishing ontrack safety, obtaining required authorities, and complying with all rules.

Note: All parked or secured equipment and vehicles must remain a minimum of seven feet from the nearest rail of any track unless protected by the appropriate track protection.

Rev 3.0 19 4/9/20154/9/2015

Section 8 - Requirements for Roadway Workers (§220.11)

(a) On and after July 1, 1999, the following requirements apply to a railroad that has 400,000 or more annual employee work hours:

- (1) Maintenance-of-way equipment operating without locomotive assistance between work locations shall have a working radio on at least one such unit in each multiple piece of maintenance-of-way equipment traveling together under the same movement authority. The operators of each additional piece of maintenance-of-way equipment shall have communications capability with each other.
- (2) Each maintenance-of-way work group shall have intra-group communications capability upon arriving at a work site.
- (b) On and after July 1, 1999, each employee designated by the employer to provide on-track safety for a roadway work group or groups, and each lone worker, shall be provided, and where practicable, shall maintain immediate access to a working radio. When immediate access to a working radio is not available, the employee responsible for on-track safety or lone worker shall be equipped with a radio capable of monitoring transmissions from train movements in the vicinity. A railroad with fewer than 400,000 annual employee work hours may provide immediate access to working wireless communications as an alternative to a working radio.
- (c) This section does not apply to:
 - (1) Railroads which have fewer than 400,000 annual employee work hours, and which do not operate trains in excess of 25 miles per hour; or
 - (2) Railroad operations where the work location of the roadway work group or lone worker:
 - (i) Is physically inaccessible to trains; or
 - (ii) Has no through traffic or traffic on adjacent tracks during the period when roadway workers will be present.

Rev 3.0 4/9/20154/9/2015

Section 9 - Training and Qualification (§214.343)

All contractors and their employees who are Roadway Workers and will be on railroad property will be required to receive On-Track Safety Training. A Roadway Worker who is on or near the track, within 4' from the outside rail or with the potential for fouling the track is required to have this training. Each roadway worker, upon completion of training, must demonstrate a basic knowledge of the rules and procedures related to on-track safety through testing as may be determined by the CFRC. Each contractor must ensure that all its respective roadway workers receive the CFRC Roadway Worker Protection training, initially and annually.

In addition to the basic training and testing of roadway workers, those individuals who will perform duties as Watchmen/Lookout, Flagmen, Lone Worker, POC, Roadway Maintenance Machine Operator, and Employee-in-Charge will demonstrate their qualifications by passing a written test as may be determined by the CFRC. The content of the testing materials for such positions shall reflect the needed skills for each of the positions as identified in the following section.

The FDOT Passenger Rail Operations Manager has overall responsibility for the CFRC Roadway Worker Protection Plan, including training, and will ensure that a written or electronic record of each worker who is trained and qualified in on-track safety is maintained. Each record shall include the name of the worker, the type of qualification made, and the most recent date of qualification. The RWP training records are maintained at the CFRC office located at 801 SunRail Drive, Sanford, FL. The records are available for inspection and photocopying by the Federal Railroad Administrator during regular business hours.

The FDOT Passenger Rail Operations Manager is responsible for monitoring the day-to-day compliance with this Program. Compliance with the plan shall be audited by team or individual safety observations. The results of the audits shall be reported to the FDOT Passenger Rail Operations Manager and the CFRC Executive Safety and Security Committee, composed of FDOT Senior Management and CFRC Rail Officers.

The FDOT Passenger Rail Operations Manager shall ensure that electronic copies of all CFRC Roadway Worker Training Program documents required by this section are maintained at the CFRC office. Each contractor to the railroad, including subcontractors, is required to provide all workers with the most recent versions of these documents.

All Roadway Workers are required to have these documents in their possession are responsible to ensure that they have the current versions of all documents before performing any duties on the right-of-way. If doubt exists that the documents in possession are the current versions, Roadway Workers must not foul the tracks nor perform any tasks requiring on-track safety.

Training for All Roadway Workers (§214.345)

Upon completion of the annual training, a roadway worker shall, as a minimum, be able to perform the following:

- (1) Recognize railroad tracks and understanding of the space around them within which on-track safety is required.
- (2) Know the functions and responsibilities of various persons involved with ontrack safety procedures.

(3) Comply with on-track safety instructions given by persons performing or responsible for on-track safety functions.

- (4) Know signals given by watchmen/lookouts, and the proper procedures upon receiving a train approach warning from a lookout.
- (5) Know the hazards associated with working on or near railroad tracks, including review of on-track safety rules and procedures.

Initial and periodic qualification of a roadway worker shall be evidenced by demonstrated proficiency.

Training and Qualification for Lone Workers (§214.347)

Upon completion of the annual training, lone workers shall, as a minimum, be able to perform the following:

- (1) Detection of approaching trains and prompt movement to a place of safety upon their approach.
- (2) Determination of the distance along the track at which trains must be visible in order to provide the prescribed warning time.
- (3) Rules and procedures prescribed by CFRC for individual train detection, establishment of working limits, and definite train location.
- (4) On-track safety procedures to be used in the area on which the employee is to be qualified and permitted to work alone.
- (5) Complete the SOTS1 safety form before using ITD.

Initial and periodic qualification of a lone worker shall be evidenced by demonstrated proficiency.

Training and Qualification for Watchmen/Lookouts (§214.349)

Upon completion of the annual training, a watchman/lookout shall, as a minimum, be able to perform the following:

- (1) Detect and recognize approaching trains.
- (2) Know how to effectively warn roadway workers of the approach of trains.
- (3) Determine the distance along the track at which trains must be visible in order to provide the prescribed warning time.
- (4) Know the rules and procedures of CFRC to be used for train approach warning.
- (5) Be dedicated to no other duties

Initial and periodic qualification of a watchman/lookout shall be evidenced by demonstrated proficiency.

Training and Qualification for Point-of-Contact (POC)

Training for this position, used during construction activities when the CFRC Orange Fence Policy is applied, is discussed in Appendix H.

Training and Qualification for Flagmen (§214.351)

Upon completion of the annual training, a flagman shall, as a minimum, be able to perform the following:

- (1) Know the content and application of the operating rules of CFRC pertaining to giving proper stop signals to trains and holding trains clear of working limits.
- (2) Be dedicated to no other duties

Initial and periodic qualification of a flagman shall be evidenced by demonstrated proficiency.

Training and qualification of Roadway Workers who provide On-Track Safety for Roadway Work Groups (§214.353)

The Employee in Charge is the ultimate authority for the movement of trains through the limits of a work authority. Each EIC is responsible for the strict enforcement of all safety and operating rules.

The employee-in-charge is responsible for providing on-track protection for roadway workers or work groups. The employee-in-charge is also required to establish working limits for workers and work groups the employee-in-charge supervises. Upon completion of the annual training, the employee-in-charge shall, be qualified on the following:

- (1) All the on-track safety training and qualification required of the roadway workers to be supervised and protected.
- (2) The content and application of the operating rules of the railroad pertaining to the establishment of working limits.
- (3) The content and application of the rules of the railroad pertaining to the establishment of train approach warning.
- (4) The relevant physical characteristics of the territory of the railroad upon which the roadway worker is qualified.
- (5) Know the procedure and be proficient in the radio procedure for communicating between EIC's and POC's (Appendix H).
- (6) How to perform a job briefing with all the roadway workers within their work location.

Initial and periodic qualification of a roadway worker to provide on-track safety for groups shall be evidenced by a recorded examination.

Training and Qualification in On-Track Safety for Operators of Roadway Maintenance Machines (§214.355) (ES-14)

CFRC Rules also include specific provisions for the safety of roadway workers who operate or work near roadway maintenance machines.

1. Training and Qualification

Employees who operate roadway maintenance machines must:

- 1. Pass a test certifying the employee understands how to apply proper ontrack safety procedures for roadway maintenance machines,
- 2. Receive training, and
- 3. Be qualified as a roadway maintenance machine operator or as an employee-in-charge. Anyone not meeting this requirement must only operate the machine under the direct supervision of a qualified operator.

Upon completion of the annual training, roadway workers who operate roadway maintenance machines shall, as a minimum be able to perform the following:

- (1) Know procedures to prevent a person from being struck by the machine when the machine is in motion or operation.
- (2) Know procedures to prevent any part of the machine from being struck by a train or other equipment on another track.
- (3) Know procedures to provide for stopping the machine short of other machines or obstructions on the track.
- (4) Know the methods to determine safe operating procedures for each machine that the operator is expected to operate.
- (5) Be familiar with the relevant physical characteristics of the area of the CFRC upon which the worker is qualified.

Initial and periodic qualification of a roadway worker to operate roadway maintenance machines shall be evidenced by demonstrated proficiency.

On-Track Worker Qualifications

Prerequisites for Engineering Employee Qualification

Prior to seeking qualification, engineering employees must:

- 1. Have a valid driver's license appropriate for the vehicle to be operated,
- 2. Attend an engineering department operating rules class and successfully complete all requirements.

Responsibilities of Employee Seeking Qualification

Employees must be qualified on the physical characteristics of the territory. To become qualified, the employee must make two trips on two separate days:

- 1. With an employee who is qualified on the territory, and
- 2. Over the entire territory on which employee is to be qualified. If qualifying on the complete subdivision, the trip must be over the complete subdivision. If qualifying on a portion of a subdivision, the trip must include a minimum of four control points.

When making a qualifying trip, the employee must:

1. For practice purposes only, copy the movement authority onto the prescribed form. The authority received and copied by the employee-in-charge will be the document used to

- occupy and move.
- 2. Observe the job briefing between the train dispatcher and the employee-in-charge,
- 3. Conduct job briefings during the trip,
- 4. Demonstrate the ability to operate the on-track equipment throughout the trip, and
- 5. Observe and receive instruction from the employee-in-charge on the physical characteristics.

The employee seeking qualification must demonstrate knowledge and ability on the following procedures:

- 1. Basic operation of hi-rail equipment and on-track equipment,
- 2. Electronically requesting an authority for long-term working limits,
- 3. Obtaining the authority using a dispatcher bulletin and 707 forms,
- 4. Conducting a job briefing with the train dispatcher,
- 5. Placing signs,
- 6. Conducting a job briefing with the working group.
- 7. Complying with operating rules governing the operation of switches on controlled tracks,
- 8. Managing others using long-term working limit protection, and
- 9. Clearing trains and on-track equipment movements through working limits.

During the qualification trips, the employee must demonstrate proficiency and knowledge of timetable and special instructions and physical characteristics of the territory.

Responsibilities of Examining Employee

The examining employee must obtain an Initial Operating Rules Qualification Form and Territory Qualification Form before beginning a qualification trip. He or she must also make certain the qualifying employee demonstrates proficiency on:

- 1. Electronically requesting an authority for long-term working limits, and
- 2. Properly requesting and copying an authority from the train dispatcher.

The examining employee must verbally test the qualifying employee on his or her knowledge of the:

- 1. Timetable and method of operation on the territory,
- 2. Operating rules, and
- 3. On-track worker rules.

During the qualification trip, the examining employee must:

- 1. Permit the employee to operate the on-track equipment, and
- 2. Record the employee's performance against the criteria contained on the Initial Operating Rules Qualification Form.

During the qualification trip, the examining employee must confirm the employee's ability to:

- 1. Properly apply the operating and on-track worker rules,
- 2. Communicate effectively with the train dispatcher,
- 3. Apply understanding of the applicable rules and procedures for obtaining authorities.
- 4. Conduct a job briefing with the team regarding the method of on-track safety, and
- 5. Describe the sign placement requirements.

Responsibilities of Supervisor

Only a non-contract supervisor may determine if an employee is qualified on a territory. The manager must accompany the employee on a trip over the territory and supervise the employee's performance of the following:

- 1. Identifying the specific method(s) of operation for the territory,
- 2. Obtaining the movement authority from the train dispatcher,
- 3. Operating the on-track equipment, and
- 4. Demonstrating knowledge of the physical characteristics of the territory.

An engineering department manager qualified on rules and the territory must verbally test the qualifying employee on timetable special instructions and physical characteristics for the desired territory. After the employee has successfully demonstrated knowledge of the territory and proficiency in the application of the appropriate operating and on-track worker rules, the manager must complete the Territory Qualification Form, file it with the employee's supervisor, and provide a copy to the employee.

If the qualifying employee successfully completes all the requirements, the manager will complete the Initial Operating Rules Qualification Form and enter the qualification into the appropriate computer system.

Qualification as Employee-in-Charge

Do not perform service as an employee-in-charge unless all of the following conditions are met:

- 1. Employee has attended an engineering department operating rules class and successfully completed all requirements,
- 2. Employee has been qualified as an employee-in-charge, and
- 3. Employee has completed a trip over the territory in the previous 36 months. If the employee has not completed a trip over the territory in the previous 36 months, the employee must be re-qualified.

Short-Term Project Procedure

If necessary to provide short-term qualification for an employee-in-charge, the designated supervisor is responsible for:

- 1. Qualifying the employee-in-charge on the required portion of the territory,
- 2. Entering the qualification of the employee in the appropriate system, and
- 3. Removing the qualification when the project ends.

The employee-in-charge of a short-term project must be qualified on:

- 1. The physical characteristics of the specific work location to include a minimum of two additional control points or, in TWC-D territory, a minimum of two additional miles on each side of the project limits; and
- 2. CFRC operating rules and on-track safety rules.

Section 10 - 49 CFR §214, Subpart B- Bridge Worker Safety Protection

CFRC Bridge Worker Safety Protection is based on the Title 49 CFR §214, Subpart B - Bridge Worker Safety Protection. CFRC contractors, sub-contractors and third-party contractors shall be governed by the following rules, where applicable, when working on or near CFRC bridges. These rules are in addition to any requirements of CFRC Operating Rules and CFRC S.T.A.R. Manual, CFRC Bridge Safety Management Program, Occupational Safety and Health Administration (OSHA), and other applicable rules and regulations.

Bridge Worker Safety on CFRC Right-of-Way Purpose and scope (§214.101)

- (a) The purpose of this section is to prevent accidents and casualties arising from the performance of work on CFRC railroad bridges.
- (b) This section prescribes minimum railroad safety rules for CFRC personnel performing work on bridges. Contractors may prescribe additional or more stringent operating rules, safety rules, and other special instructions not inconsistent with this section.
- (c) These provisions apply to all personnel performing work on CFRC railroad bridges.
- (d) Any working conditions involving the protection of personnel working on CFRC railroad bridges not within the subject matter addressed by this section, including respiratory protection, hazard communication, hearing protection, welding and lead exposure standards, shall be governed by the regulations of the U.S. Department of Labor, OSHA.

1. Fall protection, generally (§214.103)

- (a) Except as provided in paragraphs (b) through (d) of this section, when bridge workers work twelve feet or more above the ground or water surface, they shall be provided and shall use a personal fall arrest system or safety net system. All fall protection systems
 - required by this section shall conform to the standards set forth in Section 2, Fall Protection Systems Standards and Practices (§214.105).
- (b) (1) This section shall not apply if the installation of the fall arrest system poses a greater risk than the work to be performed. If a contractor elects not to use a fall protection system, the contractor shall provide proof to the CFRC that the installation of such device poses greater exposure to risk than performance of the work itself. Furthermore, in any action brought by FRA to enforce the fall protection requirements, the railroad or railroad contractor shall have the burden of proving that the installation of such device poses greater exposure to risk than performance of the work itself.
 - (2) This section shall not apply to bridge workers engaged in inspection of railroad bridges conducted in full compliance with the following conditions listed below. Inspections of CFRC bridges requires compliance with 49 CFR §237 and the safety considerations provided in Section 5 of the CFRC Bridge Safety Management Program.
 - i. The contractor has a written program in place that complies with the CFRC Bridge Safety Management Program and that requires training in, adherence to, and use of safe procedures associated with climbing techniques and procedures to be used;
 - ii. The bridge worker to whom this exception applies has been trained and qualified according to that program to perform bridge inspections, has been previously and voluntarily designated to perform inspections under the provision of that program,

- and has accepted the designation;
- iii. The bridge worker to whom this exception applies is familiar with the appropriate climbing techniques associated with all bridge structures the bridge worker is responsible for inspecting;
- iv. The bridge worker to whom this exception applies is engaged solely in moving on or about the bridge or observing, measuring and recording the dimensions and condition of the bridge and its components; and
- v. The bridge worker to whom this section applies is provided all equipment necessary to meet the needs of safety, including any specialized alternative systems required.
- (c) This section shall not apply where bridge workers are working on a railroad bridge equipped with walkways and railings of sufficient height, width, and strength to prevent a fall, so long as bridge workers do not work beyond the railings, over the side of the bridge, on ladders or other elevation devices, or where gaps or holes exist through which a body could fall. Where used in place of fall protection as provided for in number 2. Fall Protection Systems Standards and Practices, this paragraph (c) is satisfied by:
 - 1. Walkways and railings meeting standards set forth in the American Railway Engineering Association's Manual for Railway Engineering; and
 - 2. Roadways attached to railroad bridges, provided that bridge workers on the roadway deck work or move at a distance six feet or more from the edge of the roadway deck, or from an opening through which a person could fall.
- (d) This section shall not apply where bridge workers are performing repairs or inspections of a minor nature that are completed by working exclusively between the outside rails, including but not limited to, routine welding, spiking, anchoring, spot surfacing, and joint bolt replacement.

2. Fall protection systems standards and practices (§214.105)

- (a) General requirements. All fall protection systems required by this section shall conform to the following:
 - 1. Fall protection systems shall be used only for personal fall protection.
 - 2. Any fall protection system subjected to impact loading shall be immediately and permanently removed from service unless fully inspected and determined by a competent person to be undamaged and suitable for reuse.
 - 3. All fall protection system components shall be protected from abrasions, corrosion, or any other form of deterioration.
 - 4. All fall protection system components shall be inspected prior to each use for wear, damage, corrosion, mildew, and other deterioration. Defective components shall be permanently removed from service.
 - 5. Prior to use and after any component or system is changed, bridge workers shall be trained in the application limits of the equipment, proper hook-up, anchoring and tie-off techniques, methods of use, and proper methods of equipment inspection and storage.
 - The CFRC contractor shall provide for prompt rescue of bridge workers in the event of a fall.
 - 7. Connectors shall have a corrosion-resistant finish, and all surfaces and edges shall be smooth to prevent damage to interfacing parts of the system.

8. Connectors shall be drop forged, pressed or formed steel, or made of equivalent strength materials.

- 9. Anchorages, including single- and double-head anchors, shall be capable of supporting at least 5,000 pounds per bridge worker attached, or shall be designed, installed, and used under supervision of a qualified person as part of a complete personal fall protection system that maintains a safety factor of at least two.
- (b) Personal fall arrest systems. All components of a personal fall arrest system shall conform to the following standards:
 - 1. Lanyards and vertical lifelines that tie off one bridge worker shall have a minimum breaking strength of 5,000 pounds.
 - 2. Self-retracting lifelines and lanyards that automatically limit free fall distance to two feet or less shall have components capable of sustaining a minimum static tensile load of 3,000 pounds applied to the device with the lifeline or lanyard in the fully extended position.
 - Self-retracting lifelines and lanyards that do not limit free fall distance to two feet or less, rip stitch, and tearing and deformed lanyards shall be capable of withstanding 5,000 pounds applied to the device with the lifeline or lanyard in the fully extended position.
 - 4. Horizontal lifelines shall be designed, installed, and used under the supervision of a competent person, as part of a complete personal fall arrest system that maintains a safety factor of at least two.
 - 5. Lifelines shall not be made of natural fiber rope.
 - 6. Body belts shall not be used as components of personal fall arrest systems.
 - 7. The personal fall arrest system shall limit the maximum arresting force on a bridge worker to 1,800 pounds when used with a body harness.
 - 8. The personal fall arrest system shall bring a bridge worker to a complete stop and limit maximum deceleration distance a bridge worker travels to 3.5 feet.
 - 9. The personal fall arrest system shall have sufficient strength to withstand twice the potential impact energy of a bridge worker free falling a distance of six feet, or the free fall distance permitted by the system, whichever is less.
 - 10. The personal fall arrest system shall be arranged so that a bridge worker cannot free fall more than six feet and cannot contact the ground or any lower horizontal surface of the bridge.
 - 11. Personal fall arrest systems shall be worn with the attachment point of the body harness located in the center of the wearer's back near shoulder level, or above the wearer's head.
 - 12. When vertical lifelines are used, each bridge worker shall be provided with a separate lifeline.
 - 13. Devices used to connect to a horizontal lifeline that may become a vertical lifeline shall be capable of locking in either direction.
 - 14. Dee-rings and snap-hooks shall be capable of sustaining a minimum tensile load of 3,600 pounds without cracking, breaking, or taking permanent deformation.
 - 15. Dee-rings and snap-hooks shall be capable of sustaining a minimum tensile load of 5,000 pounds.
 - 16. Snap-hooks shall not be connected to each other.
 - 17. Snap-hooks shall be dimensionally compatible with the member to which they are connected to prevent unintentional disengagement, or shall be a locking snap-hook designed to prevent unintentional disengagement.
 - 18. Unless of a locking type, snap-hooks shall not be engaged:

- i. Directly, next to a webbing, rope, or wire rope;
- ii. To each other;
- iii. To a dee-ring to which another snap-hook or other connector is attached;
- iv. To a horizontal lifeline; or
- v. To any object that is incompatibly shaped or dimensioned in relation to the snap-hook so that unintentional disengagement could occur.
- (c) Safety net systems. Use of safety net systems shall conform to the following standards and practices:
 - 1. Safety nets shall be installed as close as practicable under the walking/working surface on which bridge workers are working, but shall not be installed more than 30 feet below such surface.
 - 2. If the distance from the working surface to the net exceeds 30 feet, bridge workers shall be protected by personal fall arrest systems.
 - 3. The safety net shall be installed such that any fall from the working surface to the net is unobstructed.
 - 4. Except as provided in this section, safety nets and net installations shall be droptested at the jobsite after initial installation and before being used as a fall protection system, whenever relocated, after major repair, and at six-month intervals if left in one place. The drop-test shall consist of a 400-pound bag of sand 30 inches, plus or minus two inches, in diameter dropped into the net from the highest (but not less than 3.5 feet) working surface on which bridge workers are to be protected.
 - i. When the CFRC contractor demonstrates that a drop-test is not feasible and, as a result, the test is not performed, the CFRC contractor, or designated competent person, shall certify that the net and its installation are in compliance with the provisions of this section by preparing a certification record prior to use of the net.
 - ii. The certification shall include an identification of the net, the date it was determined that the net was in compliance with this section, and the signature of the person making this determination. Such person's signature shall certify that the net and its installation are in compliance with this section. The most recent certification for each net installation shall be available at the jobsite where the subject net is located.
 - 5. Safety nets and their installations shall be capable of absorbing an impact force equal to that produced by the drop test specified in this section.
 - 6. The safety net shall be installed such that there is no contact with surfaces or structures below the net when subjected to an impact force equal to the drop test specified in this section.
 - 7. Safety nets shall extend outward from the outermost projection of the work surface as follows:
 - a. When the vertical distance from the working level to the horizontal plane of the net is 5 feet or less, the minimum required horizontal distance of the outer edge of the net beyond the edge of the working surface is 8 feet.
 - b. When the vertical distance from the working level to the horizontal plane of the net is 5 feet, but less than 10 feet, the minimum required horizontal distance of the outer edge of the net beyond the edge of the working surface is 10 feet.
 - c. When the vertical distance from the working level to the horizontal plane of the

net is more than 10 feet, the minimum required horizontal distance of the outer edge of the net beyond the edge of the working surface is 13 feet.

- 8. Defective nets shall not be used. Safety nets shall be inspected at least once a week for mildew, wear, damage, and other deterioration. Defective components shall be removed permanently from service.
- 9. Safety nets shall be inspected after any occurrence that could affect the integrity of the safety net system.
- 10. Tools, scraps, or other materials that have fallen into the safety net shall be removed as soon as possible and at least before the next work shift.
- 11. Each safety net shall have a border rope for webbing with a minimum breaking strength of 5,000 pounds.
- 12. The maximum size of each safety net mesh opening shall not exceed 36 square inches and shall not be longer than 6 inches on any side measured center-to-center of mesh ropes or webbing. All mesh crossing shall be secured to prevent enlargement of the mesh opening.
- 13. Connections between safety net panels shall be as strong as integral net components and shall be spaced not more than 6 inches apart.

3. Working over or adjacent to water (§214.107)

- (a) Bridge workers working over or adjacent to water with a depth of four feet or more, or where the danger of drowning exists, shall be provided and shall use life vests or buoyant work vests in compliance with U.S. Coast Guard requirements in 46 CFR 160.047, 160.052, and 160.053. Life preservers in compliance with U.S. Coast Guard requirements in 46 CFR 160.055 shall also be within ready access. This section shall not
 - apply to bridge workers using personal fall arrest systems or safety nets that comply with this subpart or to bridge workers who are working under the provisions of Sec. 214.103(b) (2), (c) or (d) of this subpart.
- (b) Prior to each use, all flotation devices shall be inspected for defects that reduce their strength or buoyancy by designated individuals trained by the railroad or railroad contractor. Defective units shall not be used.
- (c) Where life vests are required by paragraph (a) of this section, ring buoys with at least 90 feet of line shall be provided and readily available for emergency rescue operations. Distance between ring buoys shall not exceed 200 feet.
- (d) Where life vests are required, at least one lifesaving skiff, inflatable boat, or equivalent device shall be immediately available. If it is determined by a competent person that environmental conditions, including weather, water speed, and terrain, merit additional protection, the skiff or boat shall be manned.

4. Scaffolding (§214.109)

- (a) Scaffolding used in connection with railroad bridge maintenance, inspection, testing, and construction shall be constructed and maintained in a safe condition and meet the following minimum requirements:
 - 1. Each scaffold and scaffold component, except suspension ropes and guardrail systems, but including footings and anchorage, shall be capable of supporting,

- without failure, its own weight and at least four times the maximum intended load applied or transmitted to that scaffold or scaffold component.
- 2. Guardrail systems shall be capable of withstanding, without failure, a force of at least 200 pounds applied within two inches of the top edge, in any outward or downward direction, at any point along the top edge.
- 3. Top edge height of top-rails, or equivalent guardrail system member, shall be 42 inches, plus or minus three inches. Supports shall be at intervals not to exceed eight feet. Toeboards shall be a minimum of four inches in height.
- 4. Midrails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members shall be capable of withstanding, without failure, a force of at least 150 pounds applied in any downward or outward direction at any point along the midrail or other member.
- 5. (a) Midrails shall be installed at a height midway between the top edge of the guardrail system and the walking/working level.
- (b) Scaffolds shall not be altered or moved while they are occupied. This paragraph does not apply to vertical movements of mobile scaffolds that are designed to move vertically while occupied.
- (c) An access ladder or equivalent safe access shall be provided.
- (d) All exposed surfaces shall be prepared and cleared to prevent injury due to laceration, puncture, tripping, or falling hazard.
- (e) All scaffold design, construction, and repair shall be completed by competent individuals trained and knowledgeable about design criteria, intended use, structural limitations, and procedures for proper repair.
- (f) Manually propelled mobile ladder stands and scaffolds shall conform to the following:
 - 1. All manually propelled mobile ladder stands and scaffolds shall be capable of carrying the design load.
 - All ladder stands, scaffolds, and scaffold components shall be capable of supporting, without failure, displacement, or settlement, its own weight and at least four times the maximum intended load applied or transmitted to that ladder stand, scaffold, or scaffold component.
 - 3. All exposed surfaces shall be free from sharp edges or burrs.
 - 4. The maximum work level height shall not exceed four times the minimum or least base dimensions of any mobile ladder stand or scaffold. Where the basic mobile unit does not meet this requirement, suitable outrigger frames shall be employed to achieve this least base dimension, or equivalent provisions shall be made to guy or brace the unit against tipping.
 - 5. The minimum platform width for any work level shall not be less than 20 inches for mobile scaffolds (towers). Ladder stands shall have a minimum step width of 16 inches. The steps of ladder stands shall be fabricated from slip resistant treads.
 - 6. Guardrails and midrails shall conform to the requirements listed in paragraph (a) of this section.
 - 7. A climbing ladder or stairway shall be provided for proper access and egress, and shall be affixed or built into the scaffold and so located that in its use it will not have a tendency to tip the scaffold.
 - 8. Wheels or casters shall be capable of supporting, without failure, at least four times the maximum intended load applied or transmitted to that component. All scaffold casters shall be provided with a positive wheel and/or swivel lock to prevent movement. Ladder stands shall have at least two of the four casters and shall be of the swivel type.

5. Personal protective equipment, generally (§214.111)

The bridge worker shall use appropriate personal protective equipment described in this section in compliance with current CFRC safety rules in all operations where there is exposure to hazardous conditions, or where this section indicates the need for using such equipment to reduce the hazards to railroad bridge workers. The CFRC contractor shall require the use of foot protection when the potential for foot injury exists.

6. Head protection (§214.113)

- (a) Railroad bridge workers working in areas where there is a possible danger of head injury from impact, or from falling or flying objects, or from electrical shock and burns, shall be provided and shall wear protective helmets.
- (b) Helmets for the protection of railroad bridge workers against impact and penetration of falling and flying objects, or from high voltage electrical shock and burns shall conform to the national consensus standards for industrial head protection (American National Standards Institute, Z89.1-1986, Protective Headwear for Industrial Workers).

7. Foot protection (§214.115)

- (a) Railroad bridge workers are required to wear foot protection equipment when potential foot injury may result from impact, falling or flying objects, electrical shock or burns, or other hazardous condition.
- (b) Safety-toe footwear for railroad bridge workers shall conform to the national consensus standards for safety-toe footwear (American National Standards Institute, American National Standard Z41-1991, Standard for Personal Protection-Protective Footwear).

8. Eye and face protection (§214.117)

- (a) Railroad bridge workers shall be provided and shall wear eye and face protection equipment when potential eye or face injury may result from physical, chemical, or radiant agents.
- (b) Eye and face protection equipment required by this section shall conform to the national consensus standards for occupational and educational eye and face protection (American National Standards Institute, Z87.1-1989, Practice for Occupational and Educational Eye and Face Protection). Face and eye protection equipment required by this section shall be kept clean and in good repair. Use of equipment with structural or optical defects is prohibited.
- (c) Railroad bridge workers whose vision requires the use of corrective lenses, when required by this section to wear eye protection, shall be protected by goggles or spectacles of one of the following types:
 - i. Spectacles whose protective lenses provide optical correction, the frame of which includes shielding against objects reaching the wearer's eyes around the lenses;
 - ii. Goggles that can be worn over corrective lenses without disturbing the adjustment of the lenses; or
 - iii. Goggles that incorporate corrective lenses mounted behind the protective lenses.

APPENDICES

Appendix A - Definitions

Adjacent Tracks

Two or more tracks with track centers spaced less than 25 feet apart.

Blocking Device

A lever, plug, ring, or other method of control that restricts the operation of switch or signal.

Body Belt

A strap that can be secured around the waist or body and attached to a lanyard, lifeline, or deceleration device.

CFRC Orange Fence Policy

A policy, subject to the rules described in Appendix G, utilizing a physical and visual barrier such as an orange construction fence, installed a minimum of five feet from the outside from the field side of the nearest rail. This barrier delineates the approved work zone for men and equipment to perform construction activities in proximity to the active rail. When trains and OTE are passing through the working limits of the Employee-in-Charge, construction activities with men and equipment may, under this policy, continue a minimum of seven feet from centerline of the nearest track ONLY if there is no activity toward the rail, no encroachment of the fence and no potential by men or equipment to foul the track.

Competent Person

A person who is capable of identifying existing and predictable hazards in the workplace and who is authorized to take prompt corrective measures to eliminate them.

Control Operator

The railroad employee in charge of a remotely controlled switch or derail, an interlocking, or a controlled point, or a segment of controlled track.

Controlled Track

A track upon which operating rules require a train dispatcher or operator to authorize all train movements.

Definite Train Location

A system for establishing on-track safety by providing roadway workers with information about the earliest possible time that approaching trains may pass specific locations as prescribed in §214.331.

Designated Official

Any person(s) designated by the employer to receive notification of non-complying conditions on on-track roadway maintenance machines and hi-rail vehicles.

Effective Securing Device

A device used to prevent the operation of a manually operated switch or derail that is:

- (a) vandal resistant
- (b) tamper resistant
- (c) Designed to be applied, secured, uniquely tagged and removed only by the class, craft, or group of employees for whom protection is being provided.

Emergency Inspection or Repairs

Unforeseen circumstances, (such as but not limited to a derailment or forces of nature), has caused an inspection or a repair to be made to insure the safe movement of trains.

Employee

An individual who is engaged or compensated by a railroad or by a contractor to a railroad to perform any of the duties defined in this plan.

Employer

A railroad, or a contractor to a railroad, that directly engages or compensates individuals to perform any of the duties defined in this plan.

Employee-in-Charge

A designated roadway worker who is responsible for all movements and on-track safety for a roadway work group within working limits. An employee-in-charge must be qualified on Operating and On-Track Worker Rules and physical characteristics.

Equivalent

Alternative designs, materials, or methods that the railroad or railroad contractor can demonstrate will provide equal or greater safety for employees than the means specified in this plan.

Exclusive Authority to Move

The authority the train has to occupy a track(s) does not include other movements within the same limits.

Exclusive Track Occupancy

A method of establishing working limits on a controlled track in which movement authority of trains and other equipment is withheld by the train dispatcher or in case of emergency restricted by flagman.

Flagman

A designated employee whose only responsibility is to direct or restrict the movement of trains at a specific point to provide on-track protection for roadway workers, while engaged solely in performing that function.

Fouling a Track

When an individual or equipment is:

- 1. positioned so that the individual or equipment could be struck by a moving train or on-track equipment
- 2. within four feet of the field side of the nearest running rail.

Hi-Rail Vehicle

A roadway maintenance machine that has been:

- 1. equipped with retractable, flanged wheels to permit it to operate over highways or railroad tracks
- 2. manufactured to meet Federal motor vehicle safety standards

Immediate Access to a Radio

When a radio is sufficiently close to an employee to allow him to make and receive radio transmissions.

Inaccessible Track

A method of establishing working limits on non-controlled track by physically preventing entry and movement of trains and equipment.

Individual Train Detection (ITD)

A procedure by which a lone worker acquires on-track safety by seeing approaching trains and leaving the track before they arrive.

Informational Line-up of Trains

Information provided in a prescribed format to a roadway worker by the train dispatcher regarding movements of trains authorized or expected on a specific segment of track during a specific period of time.

Interlocking Limits

The tracks between the opposing home signals of an interlocking.

Invitee

Individual who has authority to temporarily enter CFRC property. This individual is not certified as a CFRC roadway worker and is not classified as a CFRC contractor.

If it is necessary for this individual to be within 25' from the outside of the rail or have the potential for fouling track, the individual is required to be escorted at all times by a CFRC certified roadway worker who has been authorized by the railroad to perform that duty.

(This definition does not apply to the general public at station platforms, highway-rail grade crossings or designated pedestrian pathways.)

Lone Worker

An individual roadway worker who is not:

- 1. being afforded on-track protection by another employee
- 2. a member of a roadway work group
- 3. engaged in a common task with another employee.

Mandatory Directive

Any movement authority or speed restriction that affects a railroad operation.

Non-controlled Track

A track upon which trains are permitted by rule or special instruction to move without receiving authorization from a train dispatcher or control operator.

On-Track Equipment (OTE)

- 1. Vehicles equipped with hi-rail attachments or;
- 2. Rail detector cars or;
- 3. Other engineering equipment.

On-Track Equipment Operator

Before performing service as an operator of on-track equipment, the employee must:

- 1. be qualified on the roadway maintenance machine as an operator
- 2. either be qualified:
 - a. as an employee-in-charge or work under the supervision of an employee-in- charge.
 - b. to operate the equipment or work under the direct supervision of an equipment operator or supervisor.

On-Track Roadway Maintenance Machine

A self-propelled, rail-mounted maintenance machine whose light weight exceeds 7500 pounds. An on-track roadway maintenance machine is not designed for highway use, nor can it be used for rail inspection.

On-Track Safety

A state of freedom from the danger of being struck by train or other equipment provided by operating and safety rules that govern track occupancy by personnel, trains and on- track equipment.

Operator

The railroad employee in charge of a remotely controlled switch or derail, an interlocking, or a controlled point, or a segment of controlled track.

An employee assigned to a train or track car when the engineer, conductor, or track car driver is not qualified on the physical characteristics or the operating rules of the territory to be traversed.

Point of Contact (POC)

An employee who provides warning to Roadway Workers of approaching trains and on - track equipment within established working limits under the direct supervision of an Employee-in-Charge and in accordance with the CFRC Orange Fence Policy.

Qualified Employee

An employee who has successfully completed all required training for, has demonstrated proficiency in, and had been authorized to perform the duties of a particular position or function.

Restricted Speed

Prepared to stop within one-half the range of vision – short of a train, obstruction, or switch improperly lined. Be on the lookout for broken rail. Speed must not exceed 15 miles per hour. This speed applies to the entire movement.

Roadway Maintenance Machine

Powered equipment, other than by hand, which is being used on or near the track for maintenance, repair, construction or inspection of track, bridges, roadway, signal, communications, or electric traction systems. These machines may have road or rail wheels or may be stationary.

Roadway Maintenance Work Train

A train which is being operated within Working Limits in conjunction with roadway maintenance, construction, or repairs, under the direction of a designated employee in charge.

Roadway Work Group

Two or more roadway workers working together on a common task.

Roadway Worker

A railroad employee, or employee of a contractor to a railroad, whose duties include the following:

- 1. inspection
- 2. construction
- maintenance
- 4. repair of
 - a. track
 - b. bridges

- c. roadway
- d. signal and communication systems
- e. electric traction systems
- f. roadway facilities, roadway maintenance machinery on or near track with the potential of fouling a track

Roadway worker also includes an employee responsible for on track protection, flagmen and watchmen/lookouts.

Track Barricade

A designated sign or obstruction fastened to a track that prevents access to the track.

Track Centers

The distance from the centerline of one track to the centerline of an adjacent track.

Train Approach Warning

A method of establishing on-track safety for roadway workers performing routine inspections or minor corrections by warning them, through one or more watchmen/lookouts, of the approach of trains in ample time to move to a place of safety.

Train Coordination

A method of establishing working limits on tracks upon which a train holds exclusive authority to move whereby the crew of that train yields that authority to a roadway worker to perform materials distribution with a work train, snow duty, or track work at a derailment site.

Train Dispatcher - controls and issues orders governing the movement of trains on a specific segment of railroad track in accordance with the operating rules of the railroad that apply to that segment of track.

Warning Tag

A tag used to indicate that equipment is out of service and should not be operated.

Watchman/Lookout

An employee designated to provide warning to roadway workers of approaching trains or on-track equipment.

Work Train

A train which is assigned to serve the Maintenance-of-Way Department in track repair and maintenance.

Working Limits

A segment of track with definite boundaries established in accordance with this rule upon which trains and engines may move only as authorized by the roadway worker having control over that defined segment of track.

Working Radio

A radio that can communicate with the train dispatcher of the railroad, or the host railroad if in joint operations (through repeater stations if necessary), from any location within the rail system.

Appendix B - CFRC Good Faith Challenge Form

Good Faith Challenge Form Name: _____ Job Position: _____ Time of Occurrence: _____ Work Location: ______ Track: ______ Nearest City/Town:_____ State: ____ If On-Track Safety Procedures are at issue, what procedures were applied at the work location? Rule(s) not being complied with (Give rule numbers, if known) If a roadway maintenance machine or hi-rail vehicle is at issue, what is the equipment number? What is non-compliant on the equipment: Other employees with information regarding the situation: Roadway Worker Signature: Date: _____ Supervisor Signature: Date: _____ Determination by Supervisor: _____ Date: _____

Rev 3.0 40 4/9/2015

Instructions: The employee making the challenge shall complete this form and give to his supervisor who shall document his determination, sign the form, and forward to the officer having jurisdiction.

Appendix C - Statement of On-Track Safety

_				5					
Limits: _				Date: / /					
Track:				Between:	Hrs				
1. 2. 3.	Determin an "X" in Determin and by us the chart Sign the	e the amour the appropri e the maxim sing your Tin checked in 3 form in the s	nt of time it ate chart. num speed netable an Step 2. pace prov	g Individual Tr will take you authorized f o d place an "ar ided. off-duty point.	to cl or the n adj	ear the tra e track yo	ack and pla	oulin	
	Use thi	s chart if it w	vill take you	u 10 seconds	or le	ss to clea	ar		
	MPH	Sight	MPH	Sight		MPH	Sight		
	10	367	45	1650		80	2933		
	15	550	50	1833		85	3115		
	20	733	55	2017		90	3300		
	25	917	60	2200		95	3482		
-	30	1100	65	2383		100	3665		
								-	
	35	1283	70	2567		105	3850		
		1283 1467	70 75	2567 2750		105 110	3850 4032		
	35 40 Use this	1467	75 will take	2750 you 20 secor	nds (110 or less b	4032 ut more th	an	
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Appendix D - Table of Required Sight Distances

Sight Distance Required For Selected Speeds When Clearing Time = 10 Seconds

MPH	FEET	MPH	FEET	MPH	FEET
10	367	35	1283	60	2200
15	550	40	1467	65	2383
20	733	45	1650	70	2567
25	917	50	1833	75	2750
30	1100	55	2017	80	2933

Sight Distance Required For Selected Speeds When Clearing TIME = 20 Seconds

MPH	FEET	MPH	FEET	MPH	FEET
10	513	35	1797	60	3080
15	770	40	2053	65	3337
20	1027	45	2310	70	3593
25	1283	50	2567	75	3850
30	1540	55	2823	80	4107

Sight Distance Required For Selected Speeds When Clearing Time = 30 Seconds

MPH	FEET	MPH	FEET	MPH	FEET
10	660	35	2310	60	3960
15	990	40	2640	65	4290
20	1320	45	2970	70	4620
25	1650	50	3300	75	4950
30	1980	55	3630	80	5280

Appendix E - EC-1 Form

EC-1 NUMBER: C&E TRAIN ID :							
1A OPR ON	TRK	DIR	FROM/BTW				TRK
TO / AND							
1B OPR ON							
TO / AND							
1C OPR ON							
TO / AND							
1 D OPR ON							
TO / AND							
2A CROSS OVER AT							
2B CROSS OVER AT							
3TRK (S) O.O.S. E	TW MP	AND MP	IN	I CHARGE OF	EMPLOYEE _		
4 UNTILHRS	//_EXT	UNTIL	HRS/_	/ EXT L	JNTIL	HRS/_	/
DO NOT EXCEED THE FOLLOWIN	IG SPEED						
5A/ MP ON		/IP AN	D MP	SIGNS _	5A CAN	IHRS DISP	R
5B/ MP ON	TRK_BTW N	ЛР AN	D MP	SIGNS _	5B CAN	IHRS DISP	R
5C MP ON							
5D / MP ON	TRK_BTW N	ЛР AN	D MP	SIGNS _	5D CAN	IHRS DISP	R
5E / MP ON	TRK_BTW_N	//P AN	D MP	SIGNS _	5E CAN	NHRS DISF	'R
6AACTIVATION FAILURE 6B CANHRS DISP ACCOUNT AUTOMATIC GRADE C AT MPON	R ROSSING WARN	6BFALSE/PART IING DEVICE MALFU TRK(S) FLAGGER _	NCTION AT				
7 DO NOT PASS		WI	THOUT PERMIS	SSION OF DISI	PATCHER 7	CANHRS DIS	PR
8 DD LOCATED AT MP	ON	TRK(S) IS TEMP	ORARILY REMO	OVED FROM S	ERVICE 8	CANHRS DIS	PR
9AHEAT WARNING 9B CANHRS DISP		FLOOD WARNING	9 A C	ANHRS [DISPR		
IN EFFECT ON TRK(S	S) ON				SD		
IN EFFECT ONTRK(S) BW MP	AND MI	>	ON			SD
10 DISPR MESSAGE(S)						IS / ARE A	NNULLED
11 OTHER INSTRUCTIONS / INFO	DRMATION						
REPORT BY LOCATION – EC – EC-1 NOTRA		FNG		EMPLOYE	F	REP	ORTING
DIR OF				TRACK		HRS DIS	
EC-1 NOTRA		FNG.		EMPLOYE			ORTING
DIR OF		ON				HRS DIS	
EC-1 NOTRA	JN ID	ENG.		EMPLOYE			ORTING
DIR OF				TRACK		HRS DIS	PR
EC-1 NOTRA	IN ID						PORTING
DIR OF				TRACK		HRS DIS	
RELEASE EC-1 AUTHORITY							
EC-1 NOTRAIN II) EV	IG EMDI	OYEE		RELEA	ASING MY AUTHOF	RITY ON
ALLTRACKS FRM / BTW		TO / AND			AT	HRS DI	
EC 1 NO	CE AT						
EC-1 NO RELEAS OK AND RECEIVED AT		HOURS DISPR HOURS DISPR					

V 09.26.2010

Appendix F - POC Daily Log

Date: POC Name:			:	
	Job Brie	fing Informa	tion	
	arge:	Туре	of Track:	
	Limits of Protection:	to	Time of Coverage:	to
Track #:	Limits of Protection:	to	Time of Coverage:	to
Track #: Authority #:	Limits of Protection:	to	Time of Coverage:	to
Train Message	#: Dispatche b Briefing:	er:	Time:	

n-Track Information					
Type of Train (Northbound / Southbound) (Amtrak, CFRC, FCEN)	Engine #	Time Stood Down	Time Back to Work	Total Stand Down Time	Notes

ALWAYS CONFIRM YOUR CONVERSATION WITH THE CFRC EMPLOYEE-IN-CHARGE WHEN STANDING DOWN AND RESUMING WORK!

Form E3002 - Rev. 7/01/09

Appendix G - EIC POC Flagging Form Flagman in Charge:______ Dispatcher Work Authority No.:______ Dispatcher____ Time____ Train Message Number: ____ Job Briefing Comments:_____ Work Limits: MP _____ to MP _____ Flagman Location:_____

Briefing Comments:								SLOW ORDE	RS	
Limits: MP to MF)	Flagmar	Location:				SPEED	MILEPOST to MILEPOST	BY EIC AUTH?	BY DISP AUTH ?
	POC 1	POC 2	POC 3	POC 4	POC 5	POC 6				
Name										
Location										
Time Off Site										
Name										
Location										
NOTE: *******ENSURE YO		N OF TRAINS P		WING ANY POO	C TO START WO	ORK*******		l 		

	ENGR/ COND	ENGINE	POC 1 Stand Resume	Down	POC 2 Stand Resume	Down	POC 3 Stand Resume	Down	POC 4 Stand Resume	Down	POC 5 Stand Resume	Down	POC 6 Stand Resume	Down	Time Traii Rele	n	Recall? Y/N	Comments
_	INITIALS		Time	Time	Rele	aseu												
+																		
_																		
+																		
_																		
_																		
-																+		
-																+		
																		Lourne speed permitted for your train, except for a

Rev 3.0 45 4/9/2015

Appendix H - Orange Fence Policy and Communication Procedure

The Orange Fence Policy supplements CFRC's Operating Rules and STAR Manual Rules, which shall govern over any conflict or inconsistency between this Orange Fence Policy and said Rules. Terms herein shall have the same meaning as in said Rules.

- 1. Provided that orange construction fence is erected at a minimum of 5' from the outside (nearest running) rail, the trains will contact the Employee-in-Charge (EIC) for permission through the respected 707 limits.
- 2. The EIC will contact and announce the train's approach to the POC's. Contractor appointed Points of Contact (POC's) will be distributed throughout the 707 limits in which the EIC is protecting.
- 3. POC's will alert all persons and equipment within the work group to move <u>a minimum</u> of 7' away from the rail. All cranes and equipment with the potential of fouling the track such as but not limited to excavators must be locked down or shut down. **No construction or crane activity will be allowed toward the rail.**
- 4. Work from the 7' mark from the outside (nearest running) rail will continue undisturbed throughout the 707 with the POC's acknowledging the passing of the train with hand signals. At any time that the 5' envelope is encroached, the party must have positive protection from the EIC regardless of the circumstances per the CFRC RWP Safety Plan.
- 5. This policy of continued work will only be allowed provided that the fence is erected and serving its intended function. It will be the POC's responsibility to inspect and relay to the EIC that the fence is erect and serving its intended purpose to act as a barrier to prevent men and equipment from invading the RWP policy before allowing work to proceed or continue. In the event that the fence is not erected or if an activity calls for invading the 5' envelope, then the EIC must be contacted for protection per the RWP policy. If a fence is not present or functional, then the standard policy of contacting and being accounted for by the flagmen will stand before the release of a train is permitted.

POC Training

The POC provides warning to roadway workers of approaching trains or on-track equipment within established working limits under the direct supervision of the EIC and in accordance with the CFRC Orange Fence Policy.

The POC must be qualified on:

- 1. The physical characteristics of the specific work location to include a minimum of two additional control points or, in TWC-D territory, a minimum of two additional miles on each side of the project limits; and
- 2. CFRC operating rules and on-track safety rules.

Upon completion of the annual training the Point of Contact shall be able to:

- 1. Detect and recognize approaching trains.
- 2. Know how to effectively warn roadway workers of the approach of trains.

3. Understand the on-track safety training and qualification required of the roadway workers to be supervised and protected.

- 4. The relevant physical characteristics of the territory of the railroad upon which the POC roadway was qualified.
- 5. Know the content and application of the operating rules of CFRC pertaining to giving proper stop signals to trains and holding trains clear of working limits.
- 6. Know the procedure and be proficient in the radio procedure for communicating between EIC's and POC's.
- 7. Proficiently perform a job briefing with all the roadway workers within their work location.
- 8. Be dedicated to no other duties

Employee-in-Charge / Point of Contact Responsibilities

FRA and CFRC Policy allows for one EIC (RWIC) to provide on-track safety for multiple groups working together for a specific job or a particular work situation. A POC will be assigned for each work group in the CFRC Operating Rule 707 work zones working under the EIC's authority. The EIC will determine based on 707 limits, planned work and the number of work groups within those limits the number of POC necessary to properly protect the employees that are working within the 707 limits.

Multiple POC's may be assigned to an EIC throughout the entire working limit. These individuals will be responsible for communication and coordination with the EIC for that working limit and will also be responsible to commence work only after receiving a proper job briefing from the EIC. Each POC will in turn conduct a job briefing with all members of his group and, at a minimum, cover the On-Track Safety job-briefing checklist.

The POCs' ultimate responsibility is to provide on-site safety for roadway workers and equipment under their charge. A POC may have other duties assigned only when they have been released from their duty to provide track protection for work crews by the EIC.

The responsibilities of the POCs include the following:

- Each POC is responsible for the protection of all workers under their charge. They must determine that each of the workers and the equipment are not fouling the track nor, have the potential to foul the track, while in "stand down" mode.
- Each POC will stay alert for approaching trains. When trains do pass the work site, they will observe trains for any unusual conditions or hazards.
- During on-track movements, work may continue to operate in accordance with the FRA Regulations governing Roadway Worker Protection. There will be no activities permitted or allowed to swing towards the track after the POC has been informed of an approaching train.
- Any concerns observed by trains or personnel that may violate these listed provisions must be reported immediately to the EIC for investigation.
- Each POC is responsible for ensuring that all temporary grade crossings within the work limits are secured and locked at all times when not in use.
- Each POC will make an inspection of all orange construction fencing within the assigned

working limits to assess its presence, condition and continuity at the beginning of each workday. Fencing that is in need of repair must be reported to the immediate supervisor and repaired before work commences.

 A POC must immediately notify the appropriate officers and emergency personnel when an incident or injury occurs.

Employee-in-Charge / Point of Contact Communications

Each Employee-in-Charge and each Point of Contact is required to have a CFRC working radio and have it turned on and programmed to the proper radio channel while working on the corridor. Each EIC/POC must adhere to the following radio procedures and be able to ensure proper understanding by each.

When an EIC receives a request to enter the defined 707 work limits, each EIC will determine the track to be used by track designation. After receiving this information and recording the information on the CFRC EIC POC Flagging Form (included in Appendix F), the EIC will contact each POC to "stand down" and ensure that no roadway workers will foul the track or be in a position to potentially foul any tracks defined within the work limits.

Upon notification by the EIC of an approaching train or on track vehicle, the POC must determine that the track is safe for train movement and that all workers, on-track equipment and other machines are clear of the track to be used. After determining that workers and/or equipment are not fouling the track, the POC will notify the EIC that all workers and equipment are "stood-down", not fouling the track. After receiving this information, each EIC/POC will record the "stand down" time in the CFRC POC Daily Log (included in Appendix F) form.

When a POC is instructed by an Employee-in-Charge to have all workers and equipment "stand down" (not fouling the tracks), the POC will acknowledge to the Employee-in-Charge as follows:

"[E-I-C Name], please stand by while [POC's Name] work site stands down."

The POC will then sound the air horn or whistle three times [3-one-second blasts] to provide advanced warning to workers. After ensuring that all workers and equipment are stood down (not fouling the tracks), the POC will notify the Employee-in-Charge as follows:

"[E-I-C Name], [POC's Name] has all workers and equipment standing down not fouling the tracks."

The Employee-in-Charge will then confirm with each POC that his/her workers and equipment are stood down, and then call the approaching train to grant permission through the working limits. If the Employee-in-Charge is providing protection for multiple Points-of-Contact, then the Employee-in-Charge will complete this for each Point-of-Contact within his/her working limits.

Once all trains have passed the work site/location, the POC will notify the Employee-in-Charge that the train has passed their work zone. This is to be communicated in the following manner:

"[E-I-C Name], the Northbound/Southbound Amtrak/CSXT/SunRail train, engine number # has passed [POC's Name] work zone. Is it ok to return to work?"

Once the working limits are cleared of the specified train(s), the Employee-in-Charge will notify the POC that he/she is released to resume normal work activities. The Employee-in-Charge should communicate this in the following manner:

"[POC Name], you are ok to return to normal work activity."

The POC will then confirm this with the Employee-in-Charge by repeating back the following:

"[E-I-C Name], I understand that my workers and equipment may return to normal work."

The EIC will state "[POC Name]" that is correct.

If incorrect, the Employee-in-Charge will respond as follows:

"[POC Name], "That is NOT correct! You are NOT to return to normal work activity"

The EIC will make the necessary clarifications using the above-mentioned dialogue until all communications are correct.

Above all, if there are any questions or issues on the behalf of the Point-of-Contact, he/she must "stand down" his/her workers and equipment until all questions have been answered and/or issues resolved.

Rev 3.0 49 4/9/2015